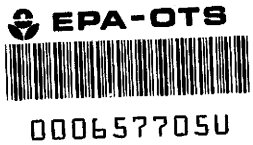
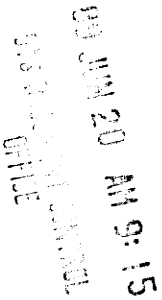
EPA

Form Approved
OMB No. 2010-0019
Approval Expires 12-31-89

CONTAINS NO CBI





90-890000 185

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Comprehensive Assessment Information Rule

REPORTING FORM

When completed, send this form to:	For Agency Use Only:
Document Processing Center Office of Toxic Substances, TS-790 U.S. Environmental Protection Agency 401 M Street, SW Washington, DC 20460 Attention: CAIR Reporting Office	Date of Receipt: _____ Document Control Number: _____ Docket Number: _____

EPA Form 7710-52

SECTION 1 GENERAL MANUFACTURER, IMPORTER, AND PROCESSOR INFORMATION

PART A GENERAL REPORTING INFORMATION

1.01 This Comprehensive Assessment Information Rule (CAIR) Reporting Form has been completed in response to the Federal Register Notice of..... [0][2] (mo.) [1][5] (day) [8][9] (year)

CBI

[ ] a. If a Chemical Abstracts Service Number (CAS No.) is provided in the Federal Register, list the CAS No. ..... [0][2][6][4][7][1]-[6][2]-[5]

b. If a chemical substance CAS No. is not provided in the Federal Register, list either (i) the chemical name, (ii) the mixture name, or (iii) the trade name of the chemical substance as provided in the Federal Register.

(i) Chemical name as listed in the rule ..... _____

(ii) Name of mixture as listed in the rule .... _____

(iii) Trade name as listed in the rule ..... _____

c. If a chemical category is provided in the Federal Register, report the name of the category as listed in the rule, the chemical substance CAS No. you are reporting on which falls under the listed category, and the chemical name of the substance you are reporting on which falls under the listed category.

Name of category as listed in the rule ..... _____

CAS No. of chemical substance ..... [ ][ ][ ][ ][ ][ ]-[ ][ ]-[ ]

Name of chemical substance ..... _____

1.02 Identify your reporting status under CAIR by circling the appropriate response(s).

CBI

Manufacturer 1

[ ] Importer 2

Processor ..... (3)

X/P manufacturer reporting for customer who is a processor 4

X/P processor reporting for customer who is a processor 5

[ ] Mark (X) this box if you attach a continuation sheet.

1.03 Does the substance you are reporting on have an "x/p" designation associated with it in the above-listed Federal Register Notice?

CBI

[ ]

Yes ..... [ ] Go to question 1.04

No ..... [x] Go to question 1.05

1.04 a. Do you manufacture, import, or process the listed substance and distribute it under a trade name(s) different than that listed in the Federal Register Notice? Circle the appropriate response.

CBI

[ ]

Yes 1

No 2

b. Check the appropriate box below:

[ ] You have chosen to notify your customers of their reporting obligations

Provide the trade name(s) .... _____

_____

[ ] You have chosen to report for your customers

[ ] You have submitted the trade name(s) to EPA one day after the effective date of the rule in the Federal Register Notice under which you are reporting.

1.05 If you buy a trade name product and are reporting because you were notified of your reporting requirements by your trade name supplier, provide that trade name.

CBI

[ ]

Trade name ..... Rubinate TDI 80/20

Is the trade name product a mixture? Circle the appropriate response.

Yes 1

No ..... (2)

1.06 Certification -- The person who is responsible for the completion of this form must sign the certification statement below:

CBI

[ ] "I hereby certify that, to the best of my knowledge and belief, all information entered on this form is complete and accurate."

Lawrence R. Carapellotti	LR Carapellotti	6-9-89
NAME	SIGNATURE	DATE SIGNED
President	(714) 739-7900	
TITLE	TELEPHONE NO.	

[ ] Mark (X) this box if you attach a continuation sheet.

1.07 Exemptions From Reporting -- If you have provided EPA or another Federal agency with the required information on a CAIR Reporting Form for the listed substance within the past 3 years, and this information is current, accurate, and complete for the time period specified in the rule, then sign the certification below. You are required to complete section 1 of this CAIR form and provide any information now required but not previously submitted. Provide a copy of any previous submissions along with your Section 1 submission.

CBI

[ ]

"I hereby certify that, to the best of my knowledge and belief, all required information which I have not included in this CAIR Reporting Form has been submitted to EPA within the past 3 years and is current, accurate, and complete for the time period specified in the rule."

NAME _____ SIGNATURE _____ DATE SIGNED _____

TITLE _____ (____) ____ - _____ TELEPHONE NO. DATE OF PREVIOUS SUBMISSION

1.08 CBI Certification -- If you have asserted any CBI claims in this report you must certify that the following statements truthfully and accurately apply to all of those confidentiality claims which you have asserted.

CBI

[ ]

"My company has taken measures to protect the confidentiality of the information, and it will continue to take these measures; the information is not, and has not been, reasonably ascertainable by other persons (other than government bodies) by using legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding) without my company's consent; the information is not publicly available elsewhere; and disclosure of the information would cause substantial harm to my company's competitive position."

NAME _____ SIGNATURE _____ DATE SIGNED _____

TITLE _____ (____) ____ - _____ TELEPHONE NO.

[ ] Mark (X) this box if you attach a continuation sheet.

PART B CORPORATE DATA

1.09 Facility Identification

CBI Name [A][R][N][C][O][ ]

[ ] Address [5][1][4][1][ ][F][I][R][E][S][T][O][N][E][ ][P][L][A][C][E][ ][ ][ ][ ][ ]
Street

[S][O][U][T][H][ ][G][A][T][E][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
City

[C][A] [9][0][2][8][0]--[ ][ ][ ][ ]
State Zip

Dun & Bradstreet Number .....[0][5]-[9][7][9]-[5][4][6][8]

EPA ID Number .....[0][5][9][7][9][5][4][6][8]

Employer ID Number .....[0][2][7][6][3][9][6][7]

Primary Standard Industrial Classification (SIC) Code .....[2][8][2][2]

Other SIC Code .....[ ][ ][ ][ ]

Other SIC Code .....[ ][ ][ ][ ]

1.10 Company Headquarters Identification

CBI Name [A][R][N][C][O][ ]

[ ] Address [O][N][E][ ][C][E][N][T][E][R][ ][P][O][I][N][T][ ][E][ ][D][R][I][V][E][ ][ ][ ]
Street

[L][A][ ][P][A][L][M][A][ ]
City

[C][A] [9][0][6][2][3]--[1][0][9][4]
State Zip

Dun & Bradstreet Number .....[0][5]-[9][7][9]-[5][4][6][8]

Employer ID Number .....[0][2][7][6][3][9][6][7]

[ ] Mark (X) this box if you attach a continuation sheet.

1.11 Parent Company Identification N/A

CBI Name [_]

[_] Address [_]
Street

[_]
City

[_] State [_]--[_] Zip

Dun & Bradstreet Number ....[_][_]-[_][_][_]-[_][_][_][_]

1.12 Technical Contact

CBI Name [EUGENE LEE]

[_] Title [TECHNICAL MANAGER]

Address [5141 FIRESTONE PLACE]
Street

[SOUTH GATE]
City

[CA] State [90280]--[_] Zip

Telephone Number ....[213]-[567]-[0587]

1.13 This reporting year is from .... [07] Mo. [87] Year to [06] Mo. [88] Year

[_] Mark (X) this box if you attach a continuation sheet.

1.14 Facility Acquired -- If you purchased this facility during the reporting year, provide the following information about the seller: N/A

CBI Name of Seller [__]

[__] Mailing Address [__]
Street

[__]
City

[__][__] [__][__][__][__][__]--[__][__][__][__]
State Zip

Employer ID Number .....[__][__][__][__][__][__][__][__]

Date of Sale .....[__][__] [__][__] [__][__]
Mo. Day Year

Contact Person [__]

Telephone Number .....[__][__][__]-[__][__][__]-[__][__][__][__]

1.15 Facility Sold -- If you sold this facility during the reporting year, provide the following information about the buyer: N/A

CBI Name of Buyer [__]

[__] Mailing Address [__]
Street

[__]
City

[__][__] [__][__][__][__][__]--[__][__][__][__]
State Zip

Employer ID Number .....[__][__][__][__][__][__][__][__]

Date of Purchase .....[__][__] [__][__] [__][__]
Mo. Day Year

Contact Person [__]

Telephone Number .....[__][__][__]-[__][__][__]-[__][__][__][__]

[__] Mark (X) this box if you attach a continuation sheet.

1.16 For each classification listed below, state the quantity of the listed substance that was manufactured, imported, or processed at your facility during the reporting year.

CBI
[ ]

Classification	Quantity (kg/yr)
Manufactured	N/A
Imported	N/A
Processed (include quantity repackaged)	146,786
Of that quantity manufactured or imported, report that quantity:	
In storage at the beginning of the reporting year	N/A
For on-site use or processing	N/A
For direct commercial distribution (including export)	N/A
In storage at the end of the reporting year	N/A
Of that quantity processed, report that quantity:	
In storage at the beginning of the reporting year	46,056
Processed as a reactant (chemical producer)	N/A
Processed as a formulation component (mixture producer)	146,786
Processed as an article component (article producer)	N/A
Repackaged (including export)	N/A
In storage at the end of the reporting year	44,270

[ ] Mark (X) this box if you attach a continuation sheet.

PART C IDENTIFICATION OF MIXTURES

1.17 Mixture -- If the listed substance on which you are required to report is a mixture or a component of a mixture, provide the following information for each component chemical. (If the mixture composition is variable, report an average percentage of each component chemical for all formulations.)

CBI

[ ]

N/A

Component Name	Supplier Name	Average % Composition by Weight (specify precision, e.g., 45% ± 0.5%)
	Total	100%

[ ] Mark (X) this box if you attach a continuation sheet.

2.04 State the quantity of the listed substance that your facility manufactured, imported, or processed during the 3 corporate fiscal years preceding the reporting year in descending order.

CBI

[ ] Year ending ..... [0][6] Mo. [8][7] Year

Quantity manufactured ..... N/A kg

Quantity imported ..... N/A kg

Quantity processed ..... 131,000 kg

Year ending ..... [0][6] Mo. [8][6] Year

Quantity manufactured ..... N/A kg

Quantity imported ..... N/A kg

Quantity processed ..... 118,000 kg

Year ending ..... [0][6] Mo. [8][5] Year

Quantity manufactured ..... N/A kg

Quantity imported ..... N/A kg

Quantity processed ..... 118,000 kg

2.05 Specify the manner in which you manufactured the listed substance. Circle all appropriate process types.

CBI

N/A

[ ]

Continuous process 1

Semicontinuous process 2

Batch process 3

[ ] Mark (X) this box if you attach a continuation sheet.

2.06 Specify the manner in which you processed the listed substance. Circle all
CBI appropriate process types.

[ ]

Continuous process 1

Semicontinuous process 2

Batch process ..... (3)

2.07 State your facility's name-plate capacity for manufacturing or processing the listed substance. (If you are a batch manufacturer or batch processor, do not answer this
CBI question.)

N/A

[ ]

Manufacturing capacity ..... _____ kg/yr

Processing capacity ..... _____ kg/yr

2.08 If you intend to increase or decrease the quantity of the listed substance manufactured, imported, or processed at any time after your current corporate fiscal year, estimate the increase or decrease based upon the reporting year's production
CBI volume.

[ ]

	Manufacturing Quantity (kg)	Importing Quantity (kg)	Processing Quantity (kg)
Amount of increase	N/A	N/A	145,000
Amount of decrease	N/A	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

2.09 For the three largest volume manufacturing or processing process types involving the listed substance, specify the number of days you manufactured or processed the listed substance during the reporting year. Also specify the average number of hours per day each process type was operated. (If only one or two operations are involved, list those.)

CBI

[ ]

	Days/Year	Average Hours/Day
Process Type #1 (The process type involving the largest quantity of the listed substance.)		
Manufactured	N/A	N/A
Processed	246	8
Process Type #2 (The process type involving the 2nd largest quantity of the listed substance.)		
Manufactured	N/A	N/A
Processed	N/A	N/A
Process Type #3 (The process type involving the 3rd largest quantity of the listed substance.)		
Manufactured	N/A	N/A
Processed	N/A	N/A

2.10 State the maximum daily inventory and average monthly inventory of the listed substance that was stored on-site during the reporting year in the form of a bulk chemical.

CBI

[ ]

Maximum daily inventory	_____	kg
Average monthly inventory	_____	kg

[ ] Mark (X) this box if you attach a continuation sheet.

2.11 Related Product Types -- List any byproducts, coproducts, or impurities present with the listed substance in concentrations greater than 0.1 percent as it is manufactured, imported, or processed. The source of byproducts, coproducts, or impurities means the source from which the byproducts, coproducts, or impurities are made or introduced into the product (e.g., carryover from raw material, reaction product, etc.).

CBI

[ ]

CAS No.	Chemical Name	Byproduct, Coproduct or Impurity[1]	Concentration (%) (specify ± % precision)	Source of Byproducts, Coproducts, or Impurities
N/A	N/A	N/A	N/A	N/A

[1]Use the following codes to designate byproduct, coproduct, or impurity:

B = Byproduct
C = Coproduct
I = Impurity

[ ] Mark (X) this box if you attach a continuation sheet.

2.12 Existing Product Types -- List all existing product types which you manufactured, imported, or processed using the listed substance during the reporting year. List the quantity of listed substance you use for each product type as a percentage of the total volume of listed substance used during the reporting year. Also list the quantity of listed substance used captively on-site as a percentage of the value listed under column b., and the types of end-users for each product type. (Refer to the instructions for further explanation and an example.)

CBI
[ ]

a. Product Types[1]	b. % of Quantity Manufactured, Imported, or Processed	c. % of Quantity Used Captively On-Site	d. Type of End-Users[2]
L	100	<0.5	I

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/Sensitizer
D = Inhibitor/Stabilizer/Scavenger/Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

2.13 Expected Product Types -- Identify all product types which you expect to manufacture, import, or process using the listed substance at any time after your current corporate fiscal year. For each use, specify the quantity you expect to manufactu import, or process for each use as a percentage of the total volume of listed substance used during the reporting year. Also list the quantity of listed substance used captively on-site as a percentage of the value listed under column b., and the types of end-users for each product type. (Refer to the instructions for further explanation and an example.)

CBI

[ ]

a. Product Types[1]	b. % of Quantity Manufactured, Imported, or Processed	c. % of Quantity Used Captively On-Site	d. Type of End-Users[2]
L	100	<0.05	I

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/ Sensitizer
D = Inhibitor/Stabilizer/Scavenger/ Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

2.14 Final Product -- Complete the following table for each type of final product manufactured, imported, or processed at your facility that contains the listed substance other than as an impurity.

CBI

[ ]

a. Product Type[1]	b. Final Product's Physical Form[2]	c. Average % Composition of Listed Substance in Final Product	d. Type of End-Users[3]
L	B	4	I

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/Sensitizer
D = Inhibitor/Stabilizer/Scavenger/Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the final product's physical form:

A = Gas
B = Liquid
C = Aqueous solution
D = Paste
E = Slurry
F1 = Powder
F2 = Crystalline solid
F3 = Granules
F4 = Other solid
G = Gel
H = Other (specify) _____

[3]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

2.15 Circle all applicable modes of transportation used to deliver bulk shipments of the CBI listed substance to off-site customers. N/A

[ ] Truck 1

Railcar 2

Barge, Vessel 3

Pipeline 4

Plane 5

Other (specify) _____ 6

2.16 Customer Use -- Estimate the quantity of the listed substance used by your customers or prepared by your customers during the reporting year for use under each category CBI of end use listed (i-iv).

[ ]

Category of End Use

i. Industrial Products

Chemical or mixture ..... 58,000 kg/yr

Article ..... N/A kg/yr

ii. Commercial Products

Chemical or mixture ..... N/A kg/yr

Article ..... N/A kg/yr

iii. Consumer Products

Chemical or mixture ..... N/A kg/yr

Article ..... N/A kg/yr

iv. Other

Distribution (excluding export) ..... N/A kg/yr

Export ..... N/A kg/yr

Quantity of substance consumed as reactant ..... N/A kg/yr

Unknown customer uses ..... N/A kg/yr

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 3 PROCESSOR RAW MATERIAL IDENTIFICATION

PART A GENERAL DATA

3.01 Specify the quantity purchased and the average price paid for the listed substance for each major source of supply listed. Product trades are treated as purchases. CBI The average price is the market value of the product that was traded for the listed substance.

[ ]

Source of Supply	Quantity (kg)	Average Price ($/kg)
The listed substance was manufactured on-site.	N/A	N/A
The listed substance was transferred from a different company site.	N/A	N/A
The listed substance was purchased directly from a manufacturer or importer.	145,000	2.37
The listed substance was purchased from a distributor or repackager.	N/A	N/A
The listed substance was purchased from a mixture producer.	N/A	N/A

3.02 Circle all applicable modes of transportation used to deliver the listed substance to CBI your facility.

[ ]

Truck ..... (1)

Railcar 2

Barge, Vessel 3

Pipeline 4

Plane 5

Other (specify) _____ 6

[ ] Mark (X) this box if you attach a continuation sheet.

3.03 CBI

a. Circle all applicable containers used to transport the listed substance to your facility.

[ ]

Bags 1

Boxes 2

Free standing tank cylinders 3

Tank rail cars 4

Hopper cars 5

Tank trucks ..... (6)

Hopper trucks 7

Drums 8

Pipeline 9

Other (specify) _____ 10

b. If the listed substance is transported in pressurized tank cylinders, tank rail cars, or tank trucks, state the pressure of the tanks.

Tank cylinders ..... N/A mmHg

Tank rail cars ..... N/A mmHg

Tank trucks ..... N/A mmHg

[ ] Mark (X) this box if you attach a continuation sheet.

PART B RAW MATERIAL IN THE FORM OF A MIXTURE

3.04 If you obtain the listed substance in the form of a mixture, list the trade name(s) of the mixture, the name of its supplier(s) or manufacturer(s), an estimate of the
CBI average percent composition by weight of the listed substance in the mixture, and the amount of mixture processed during the reporting year.
[ ]

Trade Name	Supplier or Manufacturer	Average % Composition by Weight (specify ± % precision)	Amount Processed (kg/yr)
N/A	N/A	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

PART C RAW MATERIAL VOLUME

3.05 CBI [ ] State the quantity of the listed substance used as a raw material during the reporting year in the form of a class I chemical, class II chemical, or polymer, and the percent composition, by weight, of the listed substance.

	Quantity Used (kg/yr)	% Composition by Weight of Listed Substance in Raw Material (specify ± % precision)
Class I chemical	145,000	100
Class II chemical	N/A	N/A
	N/A	N/A
	N/A	N/A
Polymer	N/A	N/A
	N/A	N/A
	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 4 PHYSICAL/CHEMICAL PROPERTIES

General Instructions:

If you are reporting on a mixture as defined in the glossary, reply to questions in Section 4 that are inappropriate to mixtures by stating "NA -- mixture."

For questions 4.06-4.15, if you possess any hazard warning statement, label, MSDS, or other notice that addresses the information requested, you may submit a copy or reasonable facsimile in lieu of answering those questions which it addresses.

PART A PHYSICAL/CHEMICAL DATA SUMMARY

4.01 Specify the percent purity for the three major[1] technical grade(s) of the listed substance as it is manufactured, imported, or processed. Measure the purity of the substance in the final product form for manufacturing activities, at the time you import the substance, or at the point you begin to process the substance.

CBI

[ ]

	Manufacture	Import	Process
Technical grade #1	N/A % purity	N/A % purity	99.7 % purity
Technical grade #2	N/A % purity	N/A % purity	N/A % purity
Technical grade #3	N/A % purity	N/A % purity	N/A % purity

[1]Major = Greatest quantity of listed substance manufactured, imported or processed.

4.02 Submit your most recently updated Material Safety Data Sheet (MSDS) for the listed substance, and for every formulation containing the listed substance. If you possess an MSDS that you developed and an MSDS developed by a different source, submit your version. Indicate whether at least one MSDS has been submitted by circling the appropriate response.

Yes ..... (1)

No 2

Indicate whether the MSDS was developed by your company or by a different source.

Your company ..... (1)

Another source 2

[ ] Mark (X) this box if you attach a continuation sheet.

4.03 Submit a copy or reasonable facsimile of any hazard information (other than an MSDS) that is provided to your customers/users regarding the listed substance or any formulation containing the listed substance. Indicate whether this information has been submitted by circling the appropriate response.

Yes ..... (1)

No 2

4.04 For each activity that uses the listed substance, circle all the applicable number(s) corresponding to each physical state of the listed substance during the activity listed. Physical states for importing and processing activities are determined at the time you import or begin to process the listed substance. Physical states for manufacturing, storage, disposal and transport activities are determined using the final state of the product.

CBI

[ ]

	Physical State				
Activity	Solid	Slurry	Liquid	Liquified Gas	Gas
Manufacture	1	2	3	4	5
Import	1	2	3	4	5
Process	1	2	(3)	4	5
Store	1	2	(3)	4	5
Dispose	(1)	2	3	4	5
Transport	(1)	2	(3)	4	5

[ ] Mark (X) this box if you attach a continuation sheet.

4.05 Particle Size -- If the listed substance exists in particulate form during any of the following activities, indicate for each applicable physical state the size and the percentage distribution of the listed substance by activity. Do not include particles ≥10 microns in diameter. Measure the physical state and particle sizes for importing and processing activities at the time you import or begin to process the listed substance. Measure the physical state and particle sizes for manufacturing storage, disposal and transport activities using the final state of the product.

CBI

[ ]

Physical State		Manufacture	Import	Process	Store	Dispose	Transport
Dust	<1 micron	N/A	N/A	N/A	N/A	N/A	N/A
	1 to <5 microns	N/A	N/A	N/A	N/A	N/A	N/A
	5 to <10 microns	N/A	N/A	N/A	N/A	N/A	N/A
Powder	<1 micron	N/A	N/A	N/A	N/A	N/A	N/A
	1 to <5 microns	N/A	N/A	N/A	N/A	N/A	N/A
	5 to <10 microns	N/A	N/A	N/A	N/A	N/A	N/A
Fiber	<1 micron	N/A	N/A	N/A	N/A	N/A	N/A
	1 to <5 microns	N/A	N/A	N/A	N/A	N/A	N/A
	5 to <10 microns	N/A	N/A	N/A	N/A	N/A	N/A
Aerosol	<1 micron	N/A	N/A	N/A	N/A	N/A	N/A
	1 to <5 microns	N/A	N/A	N/A	N/A	N/A	N/A
	5 to <10 microns	N/A	N/A	N/A	N/A	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 5 ENVIRONMENTAL FATE

PART A RATE CONSTANTS AND TRANSFORMATION PRODUCTS

5.01 Indicate the rate constants for the following transformation processes.

a. Photolysis:

Absorption spectrum coefficient (peak) .... N/A (1/M cm) at N/A nm

Reaction quantum yield, ϕ ..... N/A at N/A nm

Direct photolysis rate constant, k_p, at ... N/A 1/hr N/A latitude

b. Oxidation constants at 25°C:

For $^1O_2$ (singlet oxygen), k_{ox} ..... N/A 1/M hr

For RO_2 (peroxy radical), k_{ox} ..... N/A 1/M hr

c. Five-day biochemical oxygen demand, BOD_5 ... N/A mg/l

d. Biotransformation rate constant:

For bacterial transformation in water, k_b... N/A 1/hr

Specify culture ..... N/A

e. Hydrolysis rate constants:

For base-promoted process, k_B ..... N/A 1/M hr

For acid-promoted process, k_A ..... N/A 1/M hr

For neutral process, k_N ..... N/A 1/hr

f. Chemical reduction rate (specify conditions) N/A

g. Other (such as spontaneous degradation) ... N/A

[ ] Mark (X) this box if you attach a continuation sheet.

PART B PARTITION COEFFICIENTS

5.02 a. Specify the half-life of the listed substance in the following media.

Media	Half-life (specify units)
Groundwater	N/A
Atmosphere	N/A
Surface water	N/A
Soil	N/A

b. Identify the listed substance's known transformation products that have a half-life greater than 24 hours.

CAS No.	Name	Half-life (specify units)		Media
N/A	N/A	N/A	in	N/A
			in	
			in	
			in	

5.03 Specify the octanol-water partition coefficient, K_{ow} ... N/A at 25°C

Method of calculation or determination ..... N/A

5.04 Specify the soil-water partition coefficient, K_d ..... N/A at 25°C

Soil type ..... N/A

5.05 Specify the organic carbon-water partition coefficient, K_{oc} ..... N/A at 25°C

5.06 Specify the Henry's Law Constant, H ..... N/A atm-m^3/mole

[ ] Mark (X) this box if you attach a continuation sheet.

5.07 List the bioconcentration factor (BCF) of the listed substance, the species for which it was determined, and the type of test used in deriving the BCF.

Bioconcentration Factor	Species	Test[1]
N/A	N/A	N/A

[1]Use the following codes to designate the type of test:

F = Flowthrough
S = Static

[ ] Mark (X) this box if you attach a continuation sheet.

6.04 CBI [ ] For each market listed below, state the quantity sold and the total sales value of the listed substance sold or transferred in bulk during the reporting year.

Market	Quantity Sold or Transferred (kg/yr)	Total Sales Value ($/yr)
Retail sales		
Distribution -- Wholesalers		
Distribution -- Retailers		
Intra-company transfer		
Repackagers		
Mixture producers		
Article producers		
Other chemical manufacturers or processors		
Exporters		
Other (specify)		
_____		

6.05 CBI [ ] Substitutes -- List all known commercially feasible substitutes that you know exist for the listed substance and state the cost of each substitute. A commercially feasible substitute is one which is economically and technologically feasible to use in your current operation, and which results in a final product with comparable performance in its end uses.

Substitute	Cost ($/kg)
N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 7 MANUFACTURING AND PROCESSING INFORMATION

General Instructions:

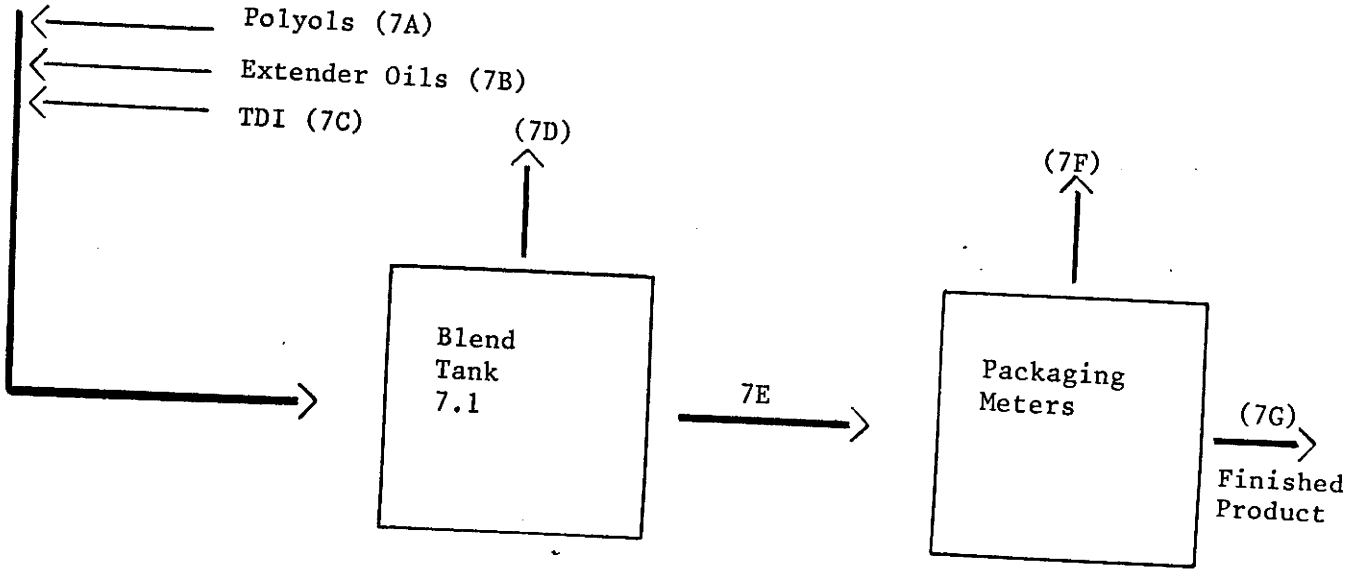
For questions 7.04-7.06, provide a separate response for each process block flow diagram provided in questions 7.01, 7.02, and 7.03. Identify the process type from which the information is extracted.

PART A MANUFACTURING AND PROCESSING PROCESS TYPE DESCRIPTION

7.01 In accordance with the instructions, provide a process block flow diagram showing the major (greatest volume) process type involving the listed substance.

CBI

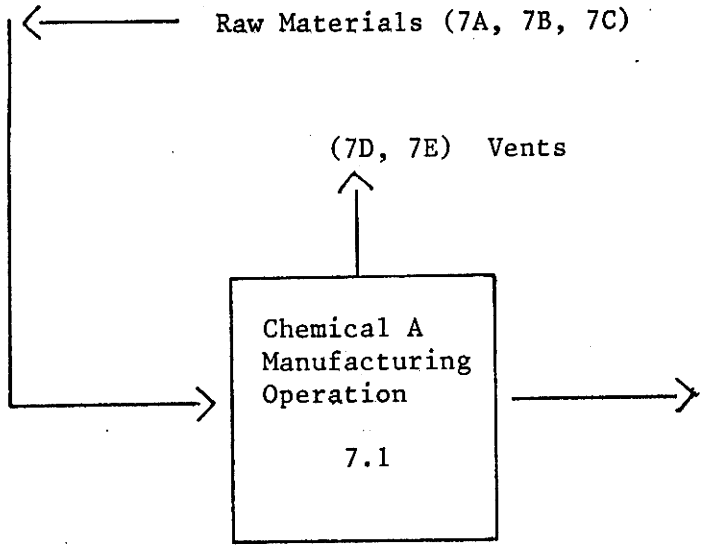
[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS



7.03 In accordance with the instructions, provide a process block flow diagram showing all process emission streams and emission points that contain the listed substance and which, if combined, would total at least 90 percent of all facility emissions if not treated before emission into the environment. If all such emissions are released from one process type, provide a process block flow diagram using the instructions for question 7.01. If all such emissions are released from more than one process type, provide a process block flow diagram showing each process type as a separate block.

CBI

[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS



[ ] Mark (X) this box if you attach a continuation sheet.

7.04 Describe the typical equipment types for each unit operation identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS

Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Composition
7.1	Mild Steel Tank	Ambient	Atmospheric	Mild Steel

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 **Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.**

CBI

[ ] **Process type .....** LIQUID CHEMICAL BLENDING PROCESS

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7D	Blend Tank Vent	GU	0.2688
7F	Packaging Vent	GU	0.2688

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] **Mark (X) this box if you attach a continuation sheet.**

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7D	AIR	99.9% (E)	N/A	N/A
	TDI	0.142PPM(A)	N/A	N/A
	EXTENDER OIL	0.01 PPM(E)	N/A	N/A
	POLYOLS	0.01 PPM(E)	N/A	N/A
7F	AIR	99.9% (E)	N/A	N/A
	TDI	0.142PPM(A)	N/A	N/A
	EXTENDER OIL	0.01 PPM(E)	N/A	N/A
	POLYOLS	0.01 PPM(E)	N/A	N/A

7.06 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

7.06 (continued)

[1]For each additive package introduced into a process stream, specify the compounds that are present in each additive package, and the concentration of each component. Assign an additive package number to each additive package and list this number in column b. (Refer to the instructions for further explanation and an example. Refer to the glossary for the definition of additive package.)

Additive Package Number	Components of Additive Package	Concentrations (% or ppm)
1	N/A	N/A
2	N/A	N/A
3	N/A	N/A
4	N/A	N/A
5	N/A	N/A

[2]Use the following codes to designate how the concentration was determined:

A = Analytical result
E = Engineering judgement/calculation

[3]Use the following codes to designate how the concentration was measured:

V = Volume
W = Weight

[ ] Mark (X) this box if you attach a continuation sheet.

PART A RESIDUAL TREATMENT PROCESS DESCRIPTION

.01 In accordance with the instructions, provide a residual treatment block flow diagram which describes the treatment process used for residuals identified in question 7.01.

CBI

[ ] Process type ..... N/A

NOTE:

Our processes do not generate any on purpose residuals (there are no residuals inherent to our processes). There are infrequently, off-spec materials, which are subsequently determined to be unsaleable to customers. These are disposed of in accordance with all applicable Federal, State and Local regulations by a licenced Hazardous Waste hauler to a permit TSD facility. Therefore, after a careful review of section 8, this section is generally not applicable.

[ ] Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... _____

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
N/A	N/A	N/A	N/A	N/A	N/A	N/A

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.05 (continued)

[1]Use the following codes to designate the type of hazardous waste:

I = Ignitable
C = Corrosive
R = Reactive
E = EP toxic
T = Toxic
H = Acutely hazardous

[2]Use the following codes to designate the physical state of the residual:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

8.05 continued below

8.05 (continued)

[3]For each additive package introduced into a process stream, specify the compounds that are present in each additive package, and the concentration of each component. Assign an additive package number to each additive package and list this number in column d. (Refer to the instructions for further explanation and an example. Refer to the glossary for the definition of additive package.)

Additive Package Number	Components of Additive Package	Concentrations (% or ppm)
1	N/A	N/A
2	N/A	N/A
3	N/A	N/A
4	N/A	N/A
5	N/A	N/A

[4]Use the following codes to designate how the concentration was determined:

A = Analytical result
E = Engineering judgement/calculation

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.05 (continued)

[5]Use the following codes to designate how the concentration was measured:

V = Volume
W = Weight

[6]Specify the analytical test methods used and their detection limits in the table below. Assign a code to each test method used and list those codes in column e.

Code	Method	Detection Limit (± ug/l)
1	N/A	N/A
2	N/A	N/A
3	N/A	N/A
4	N/A	N/A
5	N/A	N/A
6	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

8.06 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... N/A

a. Stream ID Code	b. Waste Description Code[1]	c. Management Method Code[2]	d. Residual Quantities (kg/yr)	e. Management of Residual (%) On-Site	e. Management of Residual (%) Off-Site	f. Costs for Off-Site Management (per kg)	g. Changes in Management Methods
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[1]Use the codes provided in Exhibit 8-1 to designate the waste descriptions

[2]Use the codes provided in Exhibit 8-2 to designate the management methods

[ ] Mark (X) this box if you attach a continuation sheet.

8.22 Describe the combustion chamber design parameters for each of the three largest (by capacity) incinerators that are used on-site to burn the residuals identified
CBI your process block or residual treatment block flow diagram(s).

[__]

Incinerator	Combustion Chamber Temperature (°C)		Location of Temperature Monitor		Residence Time In Combustion Chamber (seconds)	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
1						
2						
3						

Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.

Yes 1

No 2

8.23 Complete the following table for the three largest (by capacity) incinerators that are used on-site to burn the residuals identified in your process block or residual
CBI treatment block flow diagram(s).

[__]

Incinerator	Air Pollution Control Device[1]	Types of Emissions Data Available
1	N/A	N/A
2	N/A	N/A
3	N/A	N/A

Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.

N/A

Yes 1

N/A

No 2

---

[1]Use the following codes to designate the air pollution control device:

S = Scrubber (include type of scrubber in parenthesis)
E = Electrostatic precipitator
O = Other (specify) _____

[__] Mark (X) this box if you attach a continuation sheet.

PART A EMPLOYMENT AND POTENTIAL EXPOSURE PROFILE

9.01 Mark (X) the appropriate column to indicate whether your company maintains records on the following data elements for hourly and salaried workers. Specify for each data element the year in which you began maintaining records and the number of years the CBI records for that data element are maintained. (Refer to the instructions for further explanation and an example.)

[ ]

Data Element	Data are Maintained for: Hourly Workers	Salaried Workers	Year in Which Data Collection Began	Number of Years Records Are Maintained
Date of hire	X	X	1971	Indefinite
Age at hire	X	X	1971	Indefinite
Work history of individual before employment at your facility	N/A	N/A	N/A	N/A
Sex	X	X	1971	Indefinite
Race	N/A	N/A	N/A	N/A
Job titles	X	X	1971	Indefinite
Start date for each job title	X	X	1971	Indefinite
End date for each job title	X	X	1971	Indefinite
Work area industrial hygiene monitoring data	N/A	N/A	N/A	N/A
Personal employee monitoring data	N/A	N/A	N/A	N/A
Employee medical history	N/A	N/A	N/A	N/A
Employee smoking history	N/A	N/A	N/A	N/A
Accident history	X	X	1977	Indefinite
Retirement date	X	X	1971	Indefinite
Termination date	X	X	1971	Indefinite
Vital status of retirees	N/A	N/A	N/A	N/A
Cause of death data	N/A	N/A	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

9.02 In accordance with the instructions, complete the following table for each activity in which you engage.

BI

[ ]

a. Activity	b. Process Category	c. Yearly Quantity (kg)	d. Total Workers	e. Total Worker-Hours
Manufacture of the listed substance	Enclosed	N/A	N/A	N/A
	Controlled Release	N/A	N/A	N/A
	Open	N/A	N/A	N/A
On-site use as reactant	Enclosed	145,000	4	5904
	Controlled Release	N/A	N/A	N/A
	Open	N/A	N/A	N/A
On-site use as nonreactant	Enclosed	N/A	N/A	N/A
	Controlled Release	N/A	N/A	N/A
	Open	N/A	N/A	N/A
On-site preparation of products	Enclosed	N/A	N/A	N/A
	Controlled Release	N/A	N/A	N/A
	Open	N/A	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

9.03 Provide a descriptive job title for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance.

CBI

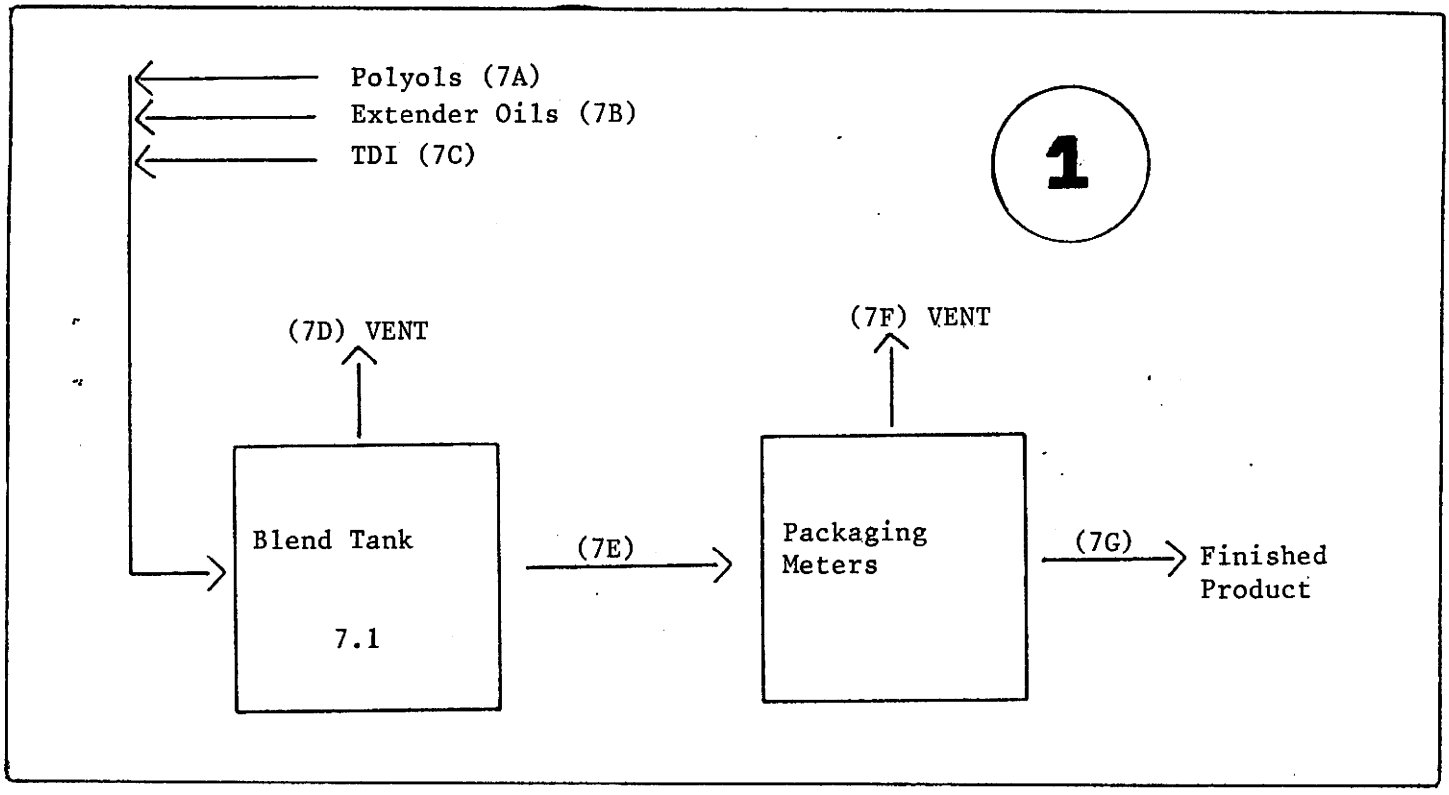
[ ]

Labor Category	Descriptive Job Title
A	General Production Worker
B	
C	
D	
E	
F	
G	
H	
I	
J	

9.04 **In accordance with the instructions, provide your process block flow diagram(s) and indicate associated work areas.**

CBI

[ ] **Process type .....** LIQUID CHEMICAL BLENDING PROCESS



[ ] **Mark (X) this box if you attach a continuation sheet.**

9.05 Describe the various work area(s) shown in question 9.04 that encompass workers who may potentially come in contact with or be exposed to the listed substance. Add any additional areas not shown in the process block flow diagram in question 7.01 or 7.02. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS

Work Area ID	Description of Work Areas and Worker Activities
1	Blending and Packaging - Blender and Packager
2	
3	
4	
5	
6	
7	
8	
9	
10	

[ ] Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question BI and complete it separately for each process type and work area.

[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS

Work area ..... BLENDING AND PACKAGING

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
A	2	Inhalation	GU	D	123

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[ ] Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS

Work area ..... Blending and Packaging

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	15-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
A	less than 0.001 ppm	less than 0.001 ppm

[ ] Mark (X) this box if you attach a continuation sheet.

PART B WORK PLACE MONITORING PROGRAM

9.08 If you monitor worker exposure to the listed substance, complete the following table.

CBI

[ ]

Sample/Test	Work Area ID	Testing Frequency (per year)	Number of Samples (per test)	Who Samples[1]	Analyzed In-House (Y/N)	Number of Years Records Maintained
Personal breathing zone	N/A	N/A	N/A	N/A	N/A	N/A
General work area (air)	N/A	N/A	N/A	N/A	N/A	N/A
Wipe samples	N/A	N/A	N/A	N/A	N/A	N/A
Adhesive patches	N/A	N/A	N/A	N/A	N/A	N/A
Blood samples	N/A	N/A	N/A	N/A	N/A	N/A
Urine samples	N/A	N/A	N/A	N/A	N/A	N/A
Respiratory samples	N/A	N/A	N/A	N/A	N/A	N/A
Allergy tests	N/A	N/A	N/A	N/A	N/A	N/A
Other (specify) _____	N/A	N/A	N/A	N/A	N/A	N/A
Other (specify) _____	N/A	N/A	N/A	N/A	N/A	N/A
Other (specify) _____	N/A	N/A	N/A	N/A	N/A	N/A

[1]Use the following codes to designate who takes the monitoring samples:

A = Plant industrial hygienist
B = Insurance carrier
C = OSHA consultant
D = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

9.09 For each sample type identified in question 9.08, describe the type of sampling and analytical methodology used for each type of sample.

CBI

[ ]	Sample Type	Sampling and Analytical Methodology
	N/A	N/A

9.10 If you conduct personal and/or ambient air monitoring for the listed substance, specify the following information for each equipment type used.

CBI

[ ]	Equipment Type[1]	Detection Limit[2]	Manufacturer	Averaging Time (hr)	Model Number
	N/A	N/A	N/A	N/A	N/A

[1]Use the following codes to designate personal air monitoring equipment types:

A = Passive dosimeter
B = Detector tube
C = Charcoal filtration tube with pump
D = Other (specify) _____

Use the following codes to designate ambient air monitoring equipment types:

E = Stationary monitors located within work area
F = Stationary monitors located within facility
G = Stationary monitors located at plant boundary
H = Mobile monitoring equipment (specify) _____
I = Other (specify) _____

[2]Use the following codes to designate detection limit units:

A = ppm
B = Fibers/cubic centimeter (f/cc)
C = Micrograms/cubic meter (μ/m^3)

[ ] Mark (X) this box if you attach a continuation sheet.

9.11 If you conduct routine medical tests for monitoring the health effects of exposure to the listed substance, specify the type and frequency of the tests.

CBI

[ ]	Test Description	Frequency (weekly, monthly, yearly, etc.)
	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS

Work area ..... Blending & Packaging Areas 1

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	1974	N	N/A
General dilution	N	N/A	N	N/A
Other (specify)				
	N	N/A	N	N/A
Vessel emission controls	N	N/A	N	N/A
Mechanical loading or packaging equipment	Y	1974	Y	1988
Other (specify)				
	N/A	N/A	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

9.13 **Describe all equipment or process modifications you have made within the 3 years prior to the reporting year that have resulted in a reduction of worker exposure to the listed substance. For each equipment or process modification described, state the percentage reduction in exposure that resulted. Photocopy this question and complete it separately for each process type and work area.**

CBI

[ ] **Process type .....** LIQUID CHEMICAL BLENDING PROCESS

Work area ..... Blending & Packaging Areas 1

Equipment or Process Modification	Reduction in Worker Exposure Per Year (%)
None	N/A

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] **Process type** ..... Liquid Chemical Blending Process

Work area ..... Blending & Packaging Areas 1

Equipment Types	Wear or Use (Y/N)
Respirators	Y
Safety goggles/glasses	Y
Face shields	Y
Coveralls	Y
Bib aprons	N
Chemical-resistant gloves	Y
Other (specify)	
Positive pressure air supply	Y

[ ] **Mark (X) this box if you attach a continuation sheet.**

9.15 If workers use respirators when working with the listed substance, specify for each process type, the work areas where the respirators are used, the type of respirators used, the average usage, whether or not the respirators were fit tested, and the type and frequency of the fit tests. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Liquid chemical blending process

Work Area	Respirator Type	Average Usage[1]	Fit Tested (Y/N)	Type of Fit Test[2]	Frequency of Fit Tests (per year)
1	N/A	N/A	N/A	N/A	N/A

[1]Use the following codes to designate average usage:

A = Daily
B = Weekly
C = Monthly
D = Once a year
E = Other (specify) _____

[2]Use the following codes to designate the type of fit test:

QL = Qualitative
QT = Quantitative

PART E WORK PRACTICES

9.19 Describe all of the work practices and administrative controls used to reduce or eliminate worker exposure to the listed substance (e.g., restrict entrance only to authorized workers, mark areas with warning signs, insure worker detection and monitoring practices, provide worker training programs, etc.). Photocopy this CBI question and complete it separately for each process type and work area.

[ ]

Process type ..... LIQUID CHEMICAL BLENDING PROCESS

Work area ..... BLENDING & PACKAGING AREAS 1

Warning Signs

Worker Training Program (monthly safety meetings)

9.20 Indicate (X) how often you perform each housekeeping task used to clean up routine leaks or spills of the listed substance. Photocopy this question and complete it separately for each process type and work area.

Process type ..... Liquid Chemical Blending Process

Work area ..... Blending & Packaging Areas 1

Housekeeping Tasks	Less Than Once Per Day	1-2 Times Per Day	3-4 Times Per Day	More Than 4 Times Per Day
Sweeping	N/A	N/A	N/A	N/A
Vacuuming	N/A	N/A	N/A	N/A
Water flushing of floors	N/A	N/A	N/A	N/A
Other (specify)				
Absorbent/Sweep	X	N/A	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

9.21 Do you have a written medical action plan for responding to routine or emergency exposure to the listed substance?

Routine exposure

Yes 1

No 2

Emergency exposure

Yes 1

No 2

If yes, where are copies of the plan maintained?

Routine exposure: _____

Emergency exposure: _____

9.22 Do you have a written leak and spill cleanup plan that addresses the listed substance? Circle the appropriate response.

Yes ..... (1)

No 2

If yes, where are copies of the plan maintained? Plant Manager's Office & Corporate Office

Has this plan been coordinated with state or local government response organizations? Circle the appropriate response.

Yes ..... (1)

No 2

9.23 Who is responsible for monitoring worker safety at your facility? Circle the appropriate response.

Plant safety specialist 1

Insurance carrier 2

OSHA consultant 3

Other (specify) _____ 4

SECTION 10 ENVIRONMENTAL RELEASE

General Instructions:

Complete Part E (questions 10.23-10.35) for each non-routine release involving the listed substance that occurred during the reporting year. Report on all releases that are equal to or greater than the listed substance's reportable quantity value, RQ, unless the release is federally permitted as defined in 42 U.S.C. 9601, or is specifically excluded under the definition of release as defined in 40 CFR 302.3(22). Reportable quantities are codified in 40 CFR Part 302. If the listed substance is not a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and, thus, does not have an RQ, then report releases that exceed 2,270 kg. If such a substance however, is designated as a CERCLA hazardous substance, then report those releases that are equal to or greater than the RQ. The facility may have answered these questions or similar questions under the Agency's Accidental Release Information Program and may already have this information readily available. Assign a number to each release and use this number throughout this part to identify the release. Releases over more than a 24-hour period are not single releases, i.e., the release of a chemical substance equal to or greater than an RQ must be reported as a separate release for each 24-hour period the release exceeds the RQ.

For questions 10.25-10.35, answer the questions for each release identified in question 10.23. Photocopy these questions and complete them separately for each release.

PART A GENERAL INFORMATION

10.01 Where is your facility located? Circle all appropriate responses.

CBI

[ ] Industrial area ..... (1)

Urban area ..... (2)

Residential area 3

Agricultural area 4

Rural area 5

Adjacent to a park or a recreational area 6

Within 1 mile of a navigable waterway 7

Within 1 mile of a school, university, hospital, or nursing home facility ..... (8)

Within 1 mile of a non-navigable waterway ..... (9)

Other (specify) _____ 10

[ ] Mark (X) this box if you attach a continuation sheet.

10.02 Specify the exact location of your facility (from central point where process unit is located) in terms of latitude and longitude or Universal Transverse Mercader (UTM) coordinates.

Latitude ..... 33 ° 57 ' 5 "

Longitude ..... 118 ° 10 ' 25 "

UTM coordinates ..... Zone _____, Northing _____, Easting _____

10.03 If you monitor meteorological conditions in the vicinity of your facility, provide the following information.

Average annual precipitation ..... _____ inches/year

Predominant wind direction ..... _____

10.04 Indicate the depth to groundwater below your facility.

Depth to groundwater ..... _____ meters

10.05 For each on-site activity listed, indicate (Y/N/NA) all routine releases of the listed substance to the environment. (Refer to the instructions for a definition of Y, N, and NA.)

CBI

[ ]

On-Site Activity	Environmental Release		
	Air	Water	Land
Manufacturing	N/A	N/A	N/A
Importing	N/A	N/A	N/A
Processing	Y	N	N
Otherwise used	N/A	N/A	N/A
Product or residual storage	N/A	N/A	N/A
Disposal	N/A	N/A	N/A
Transport	N/A	N/A	N/A

[ ] Mark (X) this box if you attach a continuation sheet.

10.06 Provide the following information for the listed substance and specify the level of precision for each item. (Refer to the instructions for further explanation and an example.)

CBI

[ ]

Quantity discharged to the air	0.5375	kg/yr ± 10	%
Quantity discharged in wastewaters	N/A	kg/yr ± N/A	%
Quantity managed as other waste in on-site treatment, storage, or disposal units	N/A	kg/yr ± N/A	%
Quantity managed as other waste in off-site treatment, storage, or disposal units	N/A See 8.01	kg/yr ± N/A	%

10.08 Describe the control technologies used to minimize release of the listed substance for each process stream containing the listed substance as identified in your process block or residual treatment block flow diagram(s). Photocopy this questi-- and complete it separately for each process type.

CBI

[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS

Stream ID Code	Control Technology	Percent Efficiency
N/A	N/A	N/A

PART B RELEASE TO AIR

10.09 Point Source Emissions -- Identify each emission point source containing the listed substance in terms of a Stream ID Code as identified in your process block or residual treatment block flow diagram(s), and provide a description of each point source. Do not include raw material and product storage vents, or fugitive emissio sources (e.g., equipment leaks). Photocopy this question and complete it separatel for each process type.

CBI
[ ]

Process type ..... LIQUID CHEMICAL BLENDING PROCESS

Point Source ID Code	Description of Emission Point Source
7D, 7F	Open-ended line (vent)

10.10 Emission Characteristics - - Characterize the emissions for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ]

Point Source ID Code	Physical State[1]	Average Emissions (kg/day)	Frequency[2] (days/yr)	Duration[3] (min/day)	Average Emission Factor[4]	Maximum Emission Rate (kg/min)	Maximum Emission Rate Frequency (events/yr)	Maximum Emission Rate Duration (min/event)
7D	G	0.00219	100	240	0.000,000,1	0.000,011,2	100	240
7F	G	0.00219	100	240	0.000,000,1	0.000,011,2	100	240

[1]Use the following codes to designate physical state at the point of release:
G = Gas; V = Vapor; P = Particulate; A = Aerosol; O = Other (specify) _____

[2]Frequency of emission at any level of emission

[3]Duration of emission at any level of emission

[4]Average Emission Factor — Provide estimated (± 25 percent) emission factor (kg of emission per kg of production of listed substance)

10.11 Stack Parameters -- Identify the stack parameters for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ]

Point Source ID Code	Stack Height(m)	Stack Inner Diameter (at outlet) (m)	Exhaust Temperature (°C)	Emission Exit Velocity (m/sec)	Building Height(m)[1]	Building Width(m)[2]	Vent Type[3]
7D, 7F	6.4	0.1016	20	0.1629	5.5	39.6	V

[1]Height of attached or adjacent building

[2]Width of attached or adjacent building

[3]Use the following codes to designate vent type:

H = Horizontal
V = Vertical

10.12 If the listed substance is emitted in particulate form, indicate the particle size distribution for each Point Source ID Code identified in question 10.09. Photocopy this question and complete it separately for each emission point source

CBI

[ ]

Point source ID code ..... N/A

Size Range (microns)	Mass Fraction (% ± % precision)
< 1	N/A
≥ 1 to < 10	N/A
≥ 10 to < 30	N/A
≥ 30 to < 50	N/A
≥ 50 to < 100	N/A
≥ 100 to < 500	N/A
≥ 500	N/A
	Total = 100%

PART C FUGITIVE EMISSIONS

10.13 Equipment Leaks -- Complete the following table by providing the number of equipment types listed which are exposed to the listed substance and which are in service according to the specified weight percent of the listed substance passing through the component. Do this for each process type identified in your process block or residual treatment block flow diagram(s). Do not include equipment types that are not exposed to the listed substance. If this is a batch or intermittently operated process, give an overall percentage of time per year that the process type is exposed to the listed substance. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS

Percentage of time per year that the listed substance is exposed to this process type ..... 50 %

Equipment Type	Number of Components in Service by Weight Percent of Listed Substance in Process Stream					
	Less than 5%	5-10%	11-25%	26-75%	76-99%	Greater than 99%
Pump seals[1]						
Packed	N/A	N/A	N/A	N/A	N/A	N/A
Mechanical	N/A	N/A	N/A	N/A	1	N/A
Double mechanical[2]	N/A	N/A	N/A	N/A	1	N/A
Compressor seals[1]	N/A	N/A	N/A	N/A	N/A	N/A
Flanges	N/A	N/A	N/A	N/A	21	N/A
Valves						
Gas[3]	N/A	N/A	N/A	N/A	N/A	N/A
Liquid	N/A	N/A	N/A	N/A	14	N/A
Pressure relief devices[4] (Gas or vapor only)	N/A	N/A	N/A	N/A	N/A	N/A
Sample connections						
Gas	N/A	N/A	N/A	N/A	N/A	N/A
Liquid	2	N/A	N/A	N/A	N/A	N/A
Open-ended lines[5] (e.g., purge, vent)						
Gas	3	N/A	N/A	N/A	N/A	N/A
Liquid	N/A	N/A	N/A	N/A	N/A	N/A

[1]List the number of pump and compressor seals, rather than the number of pumps or compressors

10.13 continued on next page

[ ] Mark (X) this box if you attach a continuation sheet.

10.13 (continued)

[2]If double mechanical seals are operated with the barrier (B) fluid at a pressure greater than the pump stuffing box pressure and/or equipped with a sensor (S) th. will detect failure of the seal system, the barrier fluid system, or both, indicate with a "B" and/or an "S", respectively

[3]Conditions existing in the valve during normal operation

[4]Report all pressure relief devices in service, including those equipped with control devices

[5]Lines closed during normal operation that would be used during maintenance operations

10.14 Pressure Relief Devices with Controls -- Complete the following table for those pressure relief devices identified in 10.13 to indicate which pressure relief devices in service are controlled. If a pressure relief device is not controlled, enter "None" under column c.

CBI

[ ]

a. Number of Pressure Relief Devices	b. Percent Chemical in Vessel[1]	c. Control Device	d. Estimated Control Efficiency[2]
N/A	N/A	N/A	N/A

[1]Refer to the table in question 10.13 and record the percent range given under the heading entitled "Number of Components in Service by Weight Percent of Listed Substance" (e.g., <5%, 5-10%, 11-25%, etc.)

[2]The EPA assigns a control efficiency of 100 percent for equipment leaks controlled with rupture discs under normal operating conditions. The EPA assigns a control efficiency of 98 percent for emissions routed to a flare under normal operating conditions

[ ] Mark (X) this box if you attach a continuation sheet.

10.15 Equipment Leak Detection -- If a formal leak detection and repair program is in place, complete the following table regarding those leak detection and repair procedures. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... LIQUID CHEMICAL BLENDING PROCESS

Equipment Type	Leak Detection Concentration (ppm or mg/m³) Measured at ____ Inches from Source	Detection Device[1]	Frequency of Leak Detection (per year)	Repairs Initiated (days after detection)	Repairs Completed (days after initiated)
Pump seals					
Packed	N/A	N/A	N/A	N/A	N/A
Mechanical	N/A	N/A	N/A	N/A	N/A
Double mechanical	N/A	N/A	N/A	N/A	N/A
Compressor seals	N/A	N/A	N/A	N/A	N/A
Flanges	N/A	N/A	N/A	N/A	N/A
Valves					
Gas	N/A	N/A	N/A	N/A	N/A
Liquid	N/A	N/A	N/A	N/A	N/A
Pressure relief devices (gas or vapor only)	N/A	N/A	N/A	N/A	N/A
Sample connections					
Gas	N/A	N/A	N/A	N/A	N/A
Liquid	N/A	N/A	N/A	N/A	N/A
Open-ended lines					
Gas	N/A	N/A	N/A	N/A	N/A
Liquid	N/A	N/A	N/A	N/A	N/A

[1]Use the following codes to designate detection device:

POVA = Portable organic vapor analyzer
FPM = Fixed point monitoring
O = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

10.16 Raw Material, Intermediate and Product Storage Emissions - - Complete the following table by providing the information on each liquid raw material, intermediate, and product storage vessel containing the listed substance as identified in your process block or residual treatment block flow diagram(s).

CBI ☐

Vessel Type[1]	Floating Roof Seals[2]	Composition of Stored Materials[3]	Throughput (liters per year)	Vessel Filling Rate (gpm)	Vessel Filling Duration (min)	Vessel Inner Diameter (m)	Vessel Height (m)	Operating Vessel Volume (l)	Vessel Emission Controls[4]	Design Flow Rate[5]	Vent Diameter (cm)	Control Efficiency (%)	Basis for Estimate[6]
H	N/A	100	118,852	44	90	2.44	4.27	19917	valve	N/A	5	99.9	C

[1]Use the following codes to designate vessel type:

F = Fixed roof
CIF = Contact internal floating roof
NCIF = Noncontact internal floating roof
EFR = External floating roof
P = Pressure vessel (indicate pressure rating)
H = Horizontal
U = Underground

[2]Use the following codes to designate floating roof seals:

MS1 = Mechanical shoe, primary
MS2 = Shoe-mounted secondary
MS2R = Rim-mounted, secondary
LM1 = Liquid-mounted resilient filled seal, primary
LM2 = Rim-mounted shield
LMW = Weather shield
VM1 = Vapor mounted resilient filled seal, primary
VM2 = Rim-mounted secondary
VMW = Weather shield

[3]Indicate weight percent of the listed substance. Include the total volatile organic content in parenthesis

[4]Other than floating roofs

[5]Gas/vapor flow rate the emission control device was designed to handle (specify flow rate units)

[6]Use the following codes to designate basis for estimate of control efficiency:

C = Calculations
S = Sampling

☐ Mark (X) this box if you attach a continuation sheet.

PART E NON-ROUTINE RELEASES

10.23 Indicate the date and time when the release occurred and when the release ceased or was stopped. If there were more than six releases, attach a continuation sheet and list all releases.

Release	Date Started	Time (am/pm)	Date Stopped	Time (am/pm)
1	06/16/88	6:30 AM	06/16/88	6:31 AM
2				
3				
4				
5				
6				

10.24 Specify the weather conditions at the time of each release.

Release	Wind Speed (km/hr)	Wind Direction	Humidity (%)	Temperature (°C)	Precipitation (Y/N)
1					
2					
3					
4					
5					
6					

HeviDuty, Part "A"

For Permanent Flatproofing of High Pressure Tires

Mix Part "A" With an Equal Volume of Part "B"

Read Material Safety Data Prior to Use

Caution!

Contains TDI 2, 4 Isomer which, based on animal research, may cause cancer. Contains hydrocarbon oil, which has caused cancer in mice after prolonged and repeated contact. May also cause pulmonary sensitization or skin and eye irritation. Wear rubber gloves and eye protection when handling contents. Only use in a well ventilated area. Asthmatics may experience a severe reaction to vapors. **FOR CHEMICAL EMERGENCY: SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CALL CHEMTREC - DAY OR NIGHT (800) 424-9300.**

First Aid

IF INHALED: Remove person to fresh air, if not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen, call a physician.
SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing.
EYE CONTACT: Flush eyes with water; continue for at least 15 minutes. Call a physician.

Spill or Leak

In case of a liquid spill, absorb the spilled material with sawdust or vermiculite, sweep into a waste container, neutralize with decontamination solution (93% water, 5% ammonia, 2% detergent) and store opened container outdoors for a minimum of 24 hours. **Disposal of neutralized waste must be in accordance with federal, state and local government environmental control regulations.**

Safety Precautions:

1. For detailed safety and technical information, refer to the **Material Safety Data Sheet and the Tire Flatproofing Manual.**
2. Contents absorb moisture. Store below 90°F. temperature. Tighten caps to seal drums for storage.
3. Material temperature should be 72° F. minimum prior to processing. Cold materials become thick which slows pumping, and can cause inadequate mixing and poor cure.
4. Be sure to inspect all rims, lock rings, wheels, and associated restraining bolts for structural defects prior to processing. **Never leave pump unattended while in operation.**
5. Liquid pressure in flatproofing equipment is five times the air supply pressure. The high pressures generated can burst tires or dislodge split rims with a lethal force. Use a safety cage, chains or other restraining devices when processing tires. Be certain tires are never pressurized over manufacturer's rated pressures.
6. Place tires in horizontal position at 72°F. minimum to cure. Tires cured vertically on equipment must be elevated and rotated 180 degrees every two hours for 6 hours.
7. Disconnect material supply hoses with caution. Loosen couplings and release pressure slowly before disconnecting.
8. Reactive materials must be thoroughly flushed from the pump and lines after shut-down, with isopropyl alcohol. Solidified material is insoluble. Clean up any spilled material before cure.

Warning: This product contains a chemical known to the State of California to cause cancer.

NOTICE TO PURCHASER: The recommendations for the use of this material are based on tests believed to be reliable. Results obtained by others under different conditions are not guaranteed. Purchaser shall determine by separate tests that this product is suitable for its intended use. NO WARRANTY OF FITNESS IS MADE FOR ANY PARTICULAR PURPOSE.

ARNCO PRODUCTS ARE PROTECTED BY THE FOLLOWING PATENTS: US 4461788, US 4426488, US 44166844, US 4327793, US 4310042, US 4273176, US 4127166, US 4081429, US 4068690, US RE 29890

arnco
5141 Firestone Place
South Gate, CA 90280-3570
Phone: (213) 567-0587 (714) 739-7900

LOT NUMBER:

NET WEIGHT: 455 lbs.

ITEM # 4.03

Permacor, Part "A"

For Permanent Flatproofing of Moderate Pressure Tires

Mix Part "A" With an Equal Volume of Part "B"

Read Material Safety Data Prior to Use

Caution!

Contains TDI 2, 4 Isomer which, based on animal research, may cause cancer. Contains hydrocarbon oil, which has caused cancer in mice after prolonged and repeated contact. May also cause pulmonary sensitization or skin and eye irritation. Wear rubber gloves and eye protection when handling contents. Only use in a well ventilated area. Asthmatics may experience a severe reaction to vapors. **FOR CHEMICAL EMERGENCY: SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CALL CHEMTREC - DAY OR NIGHT (800) 424-9300.**

First Aid

IF INHALED: Remove person to fresh air, if not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen, call a physician.
SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing.
EYE CONTACT: Flush eyes with water; continue for at least 15 minutes. Call a physician.

Spill or Leak

In case of a liquid spill, absorb the spilled material with sawdust or vermiculite, sweep into a waste container, neutralize with decontamination solution (93% water, 5% ammonia, 2% detergent) and store opened container outdoors for a minimum of 24 hours. **Disposal of neutralized waste must be in accordance with federal, state and local government environmental control regulations.**

Safety Precautions:

1. For detailed safety and technical information, refer to the **Material Safety Data Sheet and the Tire Flatproofing Manual.**
2. Contents absorb moisture. Store below 90°F. temperature. Tighten caps to seal drums for storage.
3. Material temperature should be 72° F. minimum prior to processing. Cold materials become thick which slows pumping, and can cause inadequate mixing and poor cure.
4. Be sure to inspect all rims, lock rings, wheels, and associated restraining bolts for structural defects prior to processing. **Never leave pump unattended while in operation.**
5. Liquid pressure in flatproofing equipment is five times the air supply pressure. The high pressures generated can burst tires or dislodge split rims with a lethal force. Use a safety cage, chains or other restraining devices when processing tires. Be certain tires are never pressurized over manufacturer's rated pressures.
6. Place tires in horizontal position at 72°F. minimum to cure. Tires cured vertically on equipment must be elevated and rotated 180 degrees every two hours for 6 hours.
7. Disconnect material supply hoses with caution. Loosen couplings and release pressure slowly before disconnecting.
8. Reactive materials must be thoroughly flushed from the pump and lines after shut-down, with isopropyl alcohol. Solidified material is insoluble. Clean up any spilled material before cure.

Warning: This product contains a chemical known to the State of California to cause cancer.

NOTICE TO PURCHASER: The recommendations for the use of this material are based on tests believed to be reliable. Results obtained by others under different conditions are not guaranteed. Purchaser shall determine by separate tests that this product is suitable for its intended use. NO WARRANTY OF FITNESS IS MADE FOR ANY PARTICULAR PURPOSE.

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arnco
5141 Firestone Place
South Gate, CA 90280-3570
Phone: (213) 567-0587 (714) 739-7900

LOT NUMBER:

NET WEIGHT: 454 lbs.

ITEM # 4.03

RePneu, Part "A"

Export

For Permanent Flatproofing of Moderate Pressure Tires

Mix Part "A" With an Equal Volume of Part "B"

Read Material Safety Data Prior to Use

Caution!

Contains hydrocarbon oil, which has caused cancer in mice after prolonged and repeated contact. May also cause pulmonary sensitization or skin and eye irritation. Wear rubber gloves and eye protection when handling contents. Only use in a well ventilated area. Asthmatics may experience a severe reaction to vapors. **FOR CHEMICAL EMERGENCY: SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CALL CHEMTREC - DAY OR NIGHT (800) 424-9300.**

First Aid

IF INHALED: Remove person to fresh air, if not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen, call a physician.
SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing.
EYE CONTACT: Flush eyes with water; continue for at least 15 minutes. Call a physician.

Spill or Leak

In case of a liquid spill, absorb the spilled material with sawdust or vermiculite, sweep into a waste container. Clean area with soapy water. **Disposal of waste must be in accordance with federal, state and local government environmental control regulations.**

Safety Precautions:

1. For detailed safety and technical information, refer to the **Material Safety Data Sheet and the Tire Flatproofing Manual.**
2. Contents absorb moisture. Store below 90°F. temperature. Tighten caps to seal drums for storage.
3. Material temperature should be 72° F. minimum prior to processing. Cold materials become thick which slows pumping, and can cause inadequate mixing and poor cure.
4. Be sure to inspect all rims, lock rings, wheels, and associated restraining bolts for structural defects prior to processing. **Never leave pump unattended while in operation.**
5. Liquid pressure in flatproofing equipment is five times the air supply pressure. The high pressures generated can burst tires or dislodge split rims with a lethal force. Use a safety cage, chains or other restraining devices when processing tires. Be certain tires are never pressurized over manufacturer's rated pressures.
6. Place tires in horizontal position at 72°F. minimum to cure. Tires cured vertically on equipment must be elevated and rotated 180 degrees every two hours for 6 hours.
7. Disconnect material supply hoses with caution. Loosen couplings and release pressure slowly before disconnecting.
8. Reactive materials must be thoroughly flushed from the pump and lines after shut-down, with isopropyl alcohol. Solidified material is insoluble. Clean up any spilled material before cure.

Warning: This product contains a chemical known to the State of California to cause cancer.

NOTICE TO PURCHASER: The recommendations for the use of this material are based on tests believed to be reliable. Results obtained by others under different conditions are not guaranteed. Purchaser shall determine by separate tests that this product is suitable for its intended use. NO WARRANTY OF FITNESS IS MADE FOR ANY PARTICULAR PURPOSE.

ARNCO PRODUCTS ARE PROTECTED BY THE FOLLOWING PATENTS: US 4461788, US 4426488, US 44166844, US 4327793, US 4310042, US 4273176, US 4127166, US 4081429, US 4068690, US RE 29890

arnco
5141 Firestone Place
South Gate, CA 90280-3570
Phone: (213) 567-0587 (714) 739-7900

LOT NUMBER:

NET WEIGHT: 450 lbs.

ITEM # 4.03

RePneu, Part "A"

For Permanent Flatproofing of Moderate Pressure Tires

Mix Part "A" With an Equal Volume of Part "B"

Read Material Safety Data Prior to Use

Caution!

Contains TDI 2, 4 Isomer which, based on animal research, may cause cancer. Contains hydrocarbon oil, which has caused cancer in mice after prolonged and repeated contact. May also cause pulmonary sensitization or skin and eye irritation. Wear rubber gloves and eye protection when handling contents. Only use in a well ventilated area. Asthmatics may experience a severe reaction to vapors. **FOR CHEMICAL EMERGENCY: SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CALL CHEMTREC - DAY OR NIGHT (800) 424-9300.**

First Aid

IF INHALED: Remove person to fresh air, if not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen, call a physician.
SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing.
EYE CONTACT: Flush eyes with water; continue for at least 15 minutes. Call a physician.

Spill or Leak

In case of a liquid spill, absorb the spilled material with sawdust or vermiculite, sweep into a waste container, neutralize with decontamination solution (93% water, 5% ammonia, 2% detergent) and store opened container outdoors for a minimum of 24 hours. **Disposal of neutralized waste must be in accordance with federal, state and local government environmental control regulations.**

Safety Precautions:

1. For detailed safety and technical information, refer to the **Material Safety Data Sheet and the Tire Flatproofing Manual.**
2. Contents absorb moisture. Store below 90°F. temperature. Tighten caps to seal drums for storage.
3. Material temperature should be 72° F. minimum prior to processing. Cold materials become thick which slows pumping, and can cause inadequate mixing and poor cure.
4. Be sure to inspect all rims, lock rings, wheels, and associated restraining bolts for structural defects prior to processing. **Never leave pump unattended while in operation.**
5. Liquid pressure in flatproofing equipment is five times the air supply pressure. The high pressures generated can burst tires or dislodge split rims with a lethal force. Use a safety cage, chains or other restraining devices when processing tires. Be certain tires are never pressurized over manufacturer's rated pressures.
6. Place tires in horizontal position at 72°F. minimum to cure. Tires cured vertically on equipment must be elevated and rotated 180 degrees every two hours for 6 hours.
7. Disconnect material supply hoses with caution. Loosen couplings and release pressure slowly before disconnecting.
8. Reactive materials must be thoroughly flushed from the pump and lines after shut-down, with isopropyl alcohol. Solidified material is insoluble. Clean up any spilled material before cure.

Warning: This product contains a chemical known to the State of California to cause cancer.

ARNCO PRODUCTS ARE PROTECTED BY THE FOLLOWING PATENTS: US 4461788, US 4426488, US 44166844, US 4327793, US 4310042, US 4273176, US 4127166, US 4081429, US 4068690, US RE 29890

arnco
5141 Firestone Place
South Gate, CA 90280-3570
Phone: (213) 567-0587 (714) 739-7900

LOT NUMBER:

NET WEIGHT: 455 lbs.

ITEM # 4.03

SuperFlex, Part "A"

For Permanent Flatproofing of Low Pressure Tires

Mix Part "A" With an Equal Volume of Part "B"

Read Material Safety Data Prior to Use

Caution!

Contains TDI 2, 4 Isomer which, based on animal research, may cause cancer. Contains hydrocarbon oil, which has caused cancer in mice after prolonged and repeated contact. May also cause pulmonary sensitization or skin and eye irritation. Wear rubber gloves and eye protection when handling contents. Only use in a well ventilated area. Asthmatics may experience a severe reaction to vapors. **FOR CHEMICAL EMERGENCY: SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CALL CHEMTREC - DAY OR NIGHT (800) 424-9300.**

First Aid

IF INHALED: Remove person to fresh air, if not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen, call a physician.
SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing.
EYE CONTACT: Flush eyes with water; continue for at least 15 minutes. Call a physician.

Spill or Leak

In case of a liquid spill, absorb the spilled material with sawdust or vermiculite, sweep into a waste container, neutralize with decontamination solution (93% water, 5% ammonia, 2% detergent) and store opened container outdoors for a minimum of 24 hours. **Disposal of neutralized waste must be in accordance with federal, state and local government environmental control regulations.**

Safety Precautions:

1. For detailed safety and technical information, refer to the **Material Safety Data Sheet and the Tire Flatproofing Manual.**
2. Contents absorb moisture. Store below 90°F. temperature. Tighten caps to seal drums for storage.
3. Material temperature should be 72° F. minimum prior to processing. Cold materials become thick which slows pumping, and can cause inadequate mixing and poor cure.
4. Be sure to inspect all rims, lock rings, wheels, and associated restraining bolts for structural defects prior to processing. **Never leave pump unattended while in operation.**
5. Liquid pressure in flatproofing equipment is five times the air supply pressure. The high pressures generated can burst tires or dislodge split rims with a lethal force. Use a safety cage, chains or other restraining devices when processing tires. Be certain tires are never pressurized over manufacturer's rated pressures.
6. Place tires in horizontal position at 72°F. minimum to cure. Tires cured vertically on equipment must be elevated and rotated 180 degrees every two hours for 6 hours.
7. Disconnect material supply hoses with caution. Loosen couplings and release pressure slowly before disconnecting.
8. Reactive materials must be thoroughly flushed from the pump and lines after shut-down, with isopropyl alcohol. Solidified material is insoluble. Clean up any spilled material before cure.

Warning: This product contains a chemical known to the State of California to cause cancer.

NOTICE TO PURCHASER: The recommendations for the use of this material are based on tests believed to be reliable. Results obtained by others under different conditions are not guaranteed. Purchaser shall determine by separate tests that this product is suitable for its intended use. NO WARRANTY OF FITNESS IS MADE FOR ANY PARTICULAR PURPOSE.

ARNCO PRODUCTS ARE PROTECTED BY THE FOLLOWING PATENTS: US 4461788, US 4426488, US 44166844, US 4327793, US 4310042, US 4273176, US 4127166, US 4081429, US 4068690, US RE 29890

arnco
5141 Firestone Place
South Gate, CA 90280-3570
Phone: (213) 567-0587 (714) 739-7900

LOT NUMBER:

NET WEIGHT: 453 lbs.

ITEM # 4.03

ITEM # 4.02

BEST [illegible]

Material Safety Data Sheet
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List) EXPORT RE-PNEU Component A	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name ARNCO	Emergency Telephone Number (800)424-9300
Address (Number, Street, City, State and ZIP Code) One Centerpointe Drive	Telephone Number for Information (202)483-7616
La Palma, CA 90623-1094	Date Prepared July 1987
(714)739-7900	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Toluene diisocyanate		0.02 ppm		
Petroleum hydrocarbons		0.2mg/m^3		

Section III — Physical/Chemical Characteristics

Boiling Point	446°F	Specific Gravity (H_2O = 1)	1.01
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water: Negligible.

Appearance and Odor: Amber liquid, strong pungent odor.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
331°F COC	NE	NE	NE

Extinguishing Media: Dry chemical, chemical foam, and carbon dioxide.

Special Fire Fighting Procedures: Fire fighters should use self-contained pressure demand breathing apparatus to protect against toxic vapors and combustion products.

Unusual Fire and Explosion Hazards: Water contamination will produce carbon dioxide. Do not reseal contaminated containers as pressure buildup may rupture them.

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid: Moisture contamination.
	Stable	X	

Incompatibility (*Materials to Avoid*): Water, alcohol, ammonia, amines and alkalies.

Hazardous Decomposition or Byproducts: Carbon dioxide, carbon monoxide, nitrogen oxides and traces of HCN.

Hazardous Polymerization	May Occur	X	Conditions to Avoid: High temperatures and the presence of alkalies, tertiary amines and metal compounds.
	Will Not Occur		

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion? X

Health Hazards (*Acute and Chronic*): Oral ingestion can result in stomach mucosa and possible liver toxicity. Mist and vapors can cause breathlessness, dizziness and nausea. Repeated and prolonged contact can cause irritation and allergic sensitivity for some individuals.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?
Contains petroleum oils similar to ones categorized by IARC as causing skin cancer in mice after prolonged and repeated contact.

Signs and Symptoms of Exposure
Excessive inhalation can cause immediate or delayed respiratory sensitization and asthma-like conditions. Repeated skin contact can cause reddening, swelling or blistering.

Medical Conditions Generally Aggravated by Exposure: Pre-existing unspecific bronchial hypersensitivity and potentially, any allergies.

Emergency and First Aid Procedures
INHALATION: Remove person to fresh air. If breathing id difficult, administer oxygen.
EYES: Flush immediately with water for at least 15 minutes, get medical attention if irritation occurs. SKIN: Wipe effected area with AIP followed by thorough washing with soap and water.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Properly protected personnel should contain spill. Ventilate area, cover spill with sawdust or other absorbent meterial. Scoop and place in open container and treat with decontamination solution (93% water, 5% ammonia, 2% detergent). Leave open in a ventilated area for 24 hours.

Waste Disposal Method: Bury or landfill decontaminated waste in accordance with Federal, State, and local environmental control regulations.

Precautions to Be Taken in Handling and Storing
Store below 100°F in tightly closed containers to prevent atmospheric moisture contamination. Use and store with adequate exhaust ventilation.

Other Precautions
DO NOT RESEAL containers if contamination is suspected. Good personal, hygienic practices are recommended, like washing hands before eating or smoking.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*): Use MSHA/NIOSH approved respirator for high concentrations and emergency conditions.

Ventilation	Local Exhaust	Recommended to maintain concentration below TLV limits	Special	None
	Mechanical (General)	Recommended	Other	None

Protective Gloves: Chemical Resistant, natural rubber	Eye Protection: Chemical worker's goggles

Other Protective Clothing or Equipment
Laboratory coats or suitable clothing to avoid skin contact. Accessible safety showers and eye wash stations.

Work/Hygienic Practices
Avoid unnecessary exposure to vapors or mists. Use protective equipment to minimize skin contact.

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid: Do not reseal moisture contaminated containers.
	Stable	X	Stable under recommended storage conditions.
Incompatibility (*Materials to Avoid*)			Water, alcohol, ammonia, amines, alkalies, and other substances containing active hydrogen.
Hazardous Decomposition or Byproducts			Carbon monoxide, carbon dioxide, nitrogen oxides and traces of hydrogen cyanide.
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	High temperatures and the presence of alkalies, tertiary amines and metal compounds. Polymerization heat can lead to ignition.

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion? X

Health Hazards (*Acute and Chronic*)
Possible liver toxicity if orally ingested and respiratory sensitization in some individuals.

Carcinogenicity: NTP? Not determined. IARC Monographs? OSHA Regulated?

Signs and Symptoms of Exposure
Oral ingestion can result in stomach mucous injury and possible liver toxicity. Eye contact can induce irreversible damage, unless immediately flushed with water. Prolonged skin contact will cause redness, swelling & blistering. Vapor inhalation will strongly irritate the upper and lower respiratory tract, and can induce asthma like respiratory sensitization in some individuals.

Medical Conditions Generally Aggravated by Exposure
Pre-existing unspecific bronchial hypersensitivity and potentially, any allergies.

Emergency and First Aid Procedures
INHALATION: Remove person to fresh air. If breathing is difficult, administer oxygen.
EYE/SKIN CONTACT: Flush immediately with water for at least 15 minutes; wash affected skin thoroughly with soap and water. If irritation persists, consult physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
For minor spills, evacuate and ventilate area. Wear full protective equipment, including respiratory protection. Cover container, but do not seal, & remove from work area. Prepare a decontamination solution of 0.2-5% liquid detergent and 3-8 concentrated ammonium hydroxide in water (5-10% sodium carbonate may be used in place of the ammonium hydroxide solution).

Waste Disposal Method
Slowly stir the isocyanate into the decontamination solution, using 10 parts of the solution for each part of isocyanate. Let stand for 48 hours, allowing the evolved carbon dioxide to vent away. The liquid portion may be discharged to a sewer serviced by a wastewater treatment facility. The solids can be sent to a facility permitted for non hazardous waste.

Precautions to Be Taken in Handling and Storing
Use and store with adequate exhaust ventilation. Do not breathe vapors or allow skin contact. Store in tightly closed containers to protect from atmospheric moisture. Provide a dry nitrogen pad if stored in bulk. Store at a temperature of 60-100°F. Protect from freezing.

Other Precautions
Do not reseal containers if contamination is suspected. Good personal hygienic practices are recommended.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*)
MSHA-NIOSH approved positive pressure air supplied respirator with a full face piece.

Ventilation	Local Exhaust	Yes	Special	None
	Mechanical (*General*)	Yes	Other	None
Protective Gloves	Rubber gloves		Eye Protection	Chemical workers goggles or full face shield

Other Protective Clothing or Equipment
Laboratory coats or other suitable clothing to avoid skin contact. Accessible safety showers and eye wash stations.

Work/Hygienic Practices
Handle in accordance with good industrial and safety practices. These practices include avoiding unnecessary exposure and processing under adequate exhaust ventillation.

* USGPO 1986-491-[illegible]-5775

ITEM # 4.02

Material Safety Data Sheet
May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List)
FASTCAST SUPER LINER Component A

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name ARNCO	Emergency Telephone Number (800)424-9300
Address (Number, Street, City, State, and ZIP Code) One Centerpointe Drive	Telephone Number for Information (202)483-7616
La Palma, CA 90623-1094	Date Prepared June 1988
(714)739-7900	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Antioxidant		N.E.		
Toluene Diisocyanate		0.005 ppm		
Polyether Polyol			LD 50: >10g/kg LC 50: >200 mg/L for 1 hour	

Section III — Physical/Chemical Characteristics

Boiling Point	490°F	Specific Gravity (H_2O = 1)	1.05
Vapor Pressure (mm Hg.)	N/E	Melting Point	N/A
Vapor Density (AIR = 1)	N/E	Evaporation Rate (Butyl Acetate = 1)	N/E

Solubility in Water: Reacts with water. CO^2 is released.

Appearance and Odor: Clear, syrup like, water white to light straw color. Sharp pungent odor.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
428°F COC	N.E.	N.E.	N.E.

Extinguishing Media: Dry chemical, chemical foam, carbon dioxide, halon 1311. If water is used, it should be in large quantity. Reaction between water and hot isocyanate may be vigorous.

Special Fire Fighting Procedures: Self contained breathing apparatus to protect against toxic vapors and combustion products.

Unusual Fire and Explosion Hazards: Water contamination will produce carbon dioxide. Do not reseal contaminated containers as pressure buildup may rupture them.

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	None.

Incompatibility (*Materials to Avoid*): None.

Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, oxides of nitrogen and traces of HCN

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion?

Health Hazards (*Acute and Chronic*): None Known.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

Not listed as a carcinogen by IARC, NTP, OSHA or ACGIH

Signs and Symptoms of Exposure: Over exposure may initially include: eye irritation, tearing or blurring of vision; allergic skin rashes.

Medical Conditions Generally Aggravated by Exposure: Not Known.

Emergency and First Aid Procedures

INHALATION: Remove person to fresh air. If breathing is difficult, administer oxygen.

EYES/SKIN CONTACT: Flush immediately with water for at least 15 minutes, get medical attention if swelling or reddening occurs.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled: For minor spills, shovel into a waste container, cover, but do not seal and remove from work area. Wipe off area with commercial grade isopropyl alcohol and clean wiping rag.

Waste Disposal Method: Dispose of containers with waste materials in accordance with Federal, State, and local environmental control regulations.

Precautions to Be Taken in Handling and Storing: Store below 90°F in tightly closed containers, away from open flame, sparks or high heat.

Other Precautions: Do not breathe vapors and fumes at elevated temperatures above 285°F. Wear protective equipment to prevent eye and skin contact.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*): None at normal temperature. MSHA/NIOSH approved respirator at elevated temperatures.

Ventilation	Local Exhaust	Recommended	Special	None
	Mechanical (*General*)	Recommended	Other	None

Protective Gloves: Chemical Resistant, natural rubber | Eye Protection: Chemical worker's goggles

Other Protective Clothing or Equipment: Laboratory coats or suitable clothing to avoid skin contact. Safety showers and eye wash stations.

Work/Hygienic Practices: Use and store with adequate exhaust ventilation. Wash hands thoroughly before smoking or eating.

ITEM #4.02

Material Safety Data Sheet
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List) CATAPOL SR 35 - 100

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name: ARNCO	Emergency Telephone Number: (800)424-9300
Address (Number, Street, City, State and ZIP Code): One Centerpointe Drive	Telephone Number for Information: (202)483-7616
La Palma, CA 90623-1094	Date Prepared: November 1987
(714)739-7900	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Aromatic Amine	Class III B		LC_{50}: 3.2 mg/L	
			LD_{50}: 450 mg/kg	
Blocked Isocyanate Prepolymer		N.E.		

Section III — Physical/Chemical Characteristics

Boiling Point	Will not Boil	Specific Gravity (H_2O = 1)	1.25
Vapor Pressure (mm Hg.)	N.E.	Melting Point	N.E.
Vapor Density (AIR = 1)	N.E.	Evaporation Rate (Butyl Acetate = 1)	N.E.

Solubility in Water: Insoluble.

Appearance and Odor: Viscuous liquid, essentially odorless.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	>482 COC	Flammable Limits: N.E.	LEL: N.E.	UEL: N.E.

Extinguishing Media: Dry chemical, chemical foam, carbon dioxide, and water spray.

Special Fire Fighting Procedures: Use self-contained breathing apparatus to guard against vapors at elevated temperatures above 285°F

Unusual Fire and Explosion Hazards: Water contamination may produce carbon dioxide. Do not reseal contaminated containers as pressure build up may rupture them.

FC: SUPER LINER

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid Do not reseal moisture contaminated containers.
	Stable	X	Stable under recommended storage conditions.

Incompatibility (*Materials to Avoid*): Water, alcohol, ammonia, amines, alkalies, and other substances containing active hydrogen.

Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, nitrogen oxides and traces of hydrogen cyanide.

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	High temperatures and the presence of alkalies, tertiary amines and metal compounds. Polymerization heat can lead to ignition.

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion? X

Health Hazards (*Acute and Chronic*)
Possible liver toxicity if orally ingested and respiratory sensitization in some individuals.

Carcinogenicity: NTP? Not determined. IARC Monographs? OSHA Regulated?

Signs and Symptoms of Exposure: Oral ingestion can result in stomach mucous injury and possible liver toxicity. Eye contact can induce irreversible damage, unless immediately flushed with water. Prolonged skin contact will cause redness, swelling & blistering. Vapor inhalation will strongly irritate the upper and lower respiratory tract, and can induce asthma like respiratory sensitization in some individuals.

Medical Conditions Generally Aggravated by Exposure: Pre-existing unspecific bronchial hypersensitivity and potentially, any allergies.

Emergency and First Aid Procedures
INHALATION: Remove person to fresh air. If breathing is difficult, administer oxygen.
EYE/SKIN CONTACT: Flush immediately with water for at least 15 minutes; wash affected skin thoroughly with soap and water. If irritation persists, consult physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
For minor spills, evacuate and ventilate area. Wear full protective equipment, including respiratory protection. Cover container, but do not seal, & remove from work area. Prepare a decontamination solution of 0.2-5% liquid detergent and 3-8 concentrated ammonium hydroxide in water (5-10% sodium carbonate may be used in place of the ammonium hydroxide solution).

Waste Disposal Method: Slowly stir the isocyanate into the decontamination solution, using 10 parts of the solution for each part of isocyanate. Let stand for 48 hours, allowing the evolved carbon dioxide to vent away. The liquid portion may be discharged to a sewer serviced by a wastewater treatment facility. The solids can be sent to a facility permitted for non hazardous waste.

Precautions to Be Taken in Handling and Storing
Use and store with adequate exhaust ventilation. Do not breathe vapors or allow skin contact. Store in tightly closed containers to protect from atmospheric moisture. Provide a dry nitrogen pad if stored in bulk. Store at a temperature of 60-100°F. Protect from freezing.

Other Precautions
Do not reseal containers if contamination is suspected. Good personal hygienic practices are recommended.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*): MSHA-NIOSH approved positive pressure air supplied respirator with a full face piece.

Ventilation	Local Exhaust	Yes	Special	None
	Mechanical (*General*)	Yes	Other	None

Protective Gloves: Rubber gloves	Eye Protection: Chemical workers goggles or full face shield

Other Protective Clothing or Equipment
Laboratory coats or other suitable clothing to avoid skin contact. Accessible safety showers and eye wash stations.

Work/Hygienic Practices: Handle in acordance with good industrial and safety practices. These practices include avoiding unnecessary exposure and processing under adequate exhaust ventillation.

* USGPO 1986-491-[illegible]/5775

ITEM # 4.02

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY *(As Used on Label and List)*	*Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.*
CATAPOL: SR 10 - 30	

Section I

Manufacturer's Name ARNCO	Emergency Telephone Number (800)424-9300
Address *(Number, Street, City, State, and ZIP Code)* One Centerpointe Drive	Telephone Number for Information (202)483-7616
La Palma, CA 90623-1094	Date Prepared May 1987
(714)739-7900	Signature of Preparer *(optional)*

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*
Blocked isocyanate prepolymer	N.E.	N/A		

Section III — Physical/Chemical Characteristics

Boiling Point	Will not Boil	Specific Gravity (H_2O = 1)	1.22 - 1.25
Vapor Pressure (mm Hg.)	N.E.	Melting Point	N.E.
Vapor Density (AIR = 1)	N.E.	Evaporation Rate (Butyl Acetate = 1)	N.E.

Solubility in Water
Insoluble.

Appearance and Odor
Viscuous liquid, essentially odorless.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
>482 COC	N.E.	N.E.	N.E.

Extinguishing Media
Dry chemical, chemical foam, carbon dioxide, and water spray.

Special Fire Fighting Procedures
Use self-contained breathing apparatus to guard against vapors at elevated temperatures (>285°F) and combustion products.

Unusual Fire and Explosion Hazards
Hydrogen cyanide and carbon monoxide are possible thermal decomposition products. Water produce contamination may

carbon dioxide. Do not reseal contaminated containers as pressure build up may rupture them.

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid None.
	Stable	X	

Incompatibility (*Materials to Avoid*) None.

Hazardous Decomposition or Byproducts
Carbon monoxide, carbon dioxide, oxides of nitrogen.

Hazardous Polymerization	May Occur		Conditions to Avoid None
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion?

Health Hazards (*Acute and Chronic*) None Known

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?
Not listed as a carcinogen by IARC, NTP, OSHA or ACGIH.

Signs and Symptoms of Exposure
Vapors and fumes from heated material (at temperatures of 280°F and above) can cause irritation to the eyes, skin and respiratory tract.

Medical Conditions Generally Aggravated by Exposure Not Known.

Emergency and First Aid Procedures
INHALATION: Remove person to fresh air. If breathing is difficult, administer oxygen.

EYES/SKIN CONTACT: Flush immediately with water for at least 15 minutes, get medical attention if swelling or reddening occurs.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
For minor spills, shovel into a waste container, cover, but do not seal and remove from work area. Wipe off area with commercial grade isopropyl alcohol and clean wiping rag.

Waste Disposal Method
Dispose of containers with waste materials in accordance with Federal, State, and local environmental control regulations.

Precautions to Be Taken in Handling and Storing
Use and store with adequate exhaust ventilation. Store in tightly closed containers to protect from atomospheic moisture at temperatures of 60°-100°F.

Other Precautions
Do not breathe vapors or allow skin cntact during processing/curing temperatures. Wear protective equipment to prevent eye and skin contact at temperatures 220°F and above.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*) None at normal temperature. MSHA/NIOSH approved respirator at elevated temperatures.

Ventilation	Local Exhaust	Recommended	Special	None
	Mechanical (*General*)	Recommended	Other	None

Protective Gloves: Natural rubber or neoprene gloves
Eye Protection: Chemical worker's goggles or safety glasses

Other Protective Clothing or Equipment
Laboratory coats or suitable clothing to avoid skin contact. Safety showers and eye wash stations.

Work/Hygienic Practices
Processing and curing should be done with adequate exhaust ventilation.

ITEM #4.02

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY *(As Used on Label and List)*	*Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.*
RE-PNEU Component A	

Section I

Manufacturer's Name ARNCO	Emergency Telephone Number (800)424-9300
Address *(Number, Street, City, State, and ZIP Code)* One Centerpointe Drive	Telephone Number for Information (202)483-7616
La Palma, CA 90623-1094	Date Prepared March 1987
(714)739-7900	Signature of Preparer *(optional)*

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*
Toluene diisocyanate (TDI) and TDI prepolymer		0.02 ppm		
Petroleum hydrocarbons		$0.2 mg/m^3$		

Section III — Physical/Chemical Characteristics

Boiling Point	440°F	Specific Gravity (H_2O = 1)	1.01
Vapor Pressure (mm Hg.)	NE	Melting Point	N/A
Vapor Density (AIR = 1)	NE	Evaporation Rate (Butyl Acetate = 1)	NE

Solubility in Water
Insoluble, reacts with water to liberate carbon dioxide gas.

Appearance and Odor
Coffee brown liquid, pungent odor.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
356°F COC		NE	NE

Extinguishing Media
Dry Chemical, chemical foam, carbon dioxide.

Special Fire Fighting Procedures
Wear self-contained pressure demand breathing apparatus to guard against incompletely combusted carbon products.

Unusual Fire and Explosion Hazards
Closed containers may explode from extreme heat or from water contamination (reaction releases carbon dioxide).

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid: Moisture contamination will release carbon dioxide, leading to pressure build-up in closed containers.
	Stable	X	At ambient temperature and pressure.
Incompatibility (*Materials to Avoid*)			Water, alcohols, strong bases, oxidizers and amines.
Hazardous Decomposition or Byproducts			High temperature and buring conditions may release TDI vapors, oxides of carbon and nitrogen, and traces of HCN.
Hazardous Polymerization	May Occur	X	Conditions to Avoid: Avoid prolonged heating above 160°F, for polymerization may but does not constitute a safety hazard.
	Will Not Occur		

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion? X

Health Hazards (*Acute and Chronic*)

INHALATION: May cause breathlessness, dizziness and nausea.

SKIN: Irritation and allergic sensitivity may occur for some individuals.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

Contains petroleum oils similar to ones categorized by IARC as causing skin cancer in mice after prolonged and repeated contact. Any potential hazard can be minimized by using recommended protective equipment to avoid skin contact and by washing throughly after handling.

Signs and Symptoms of Exposure

INHALATION: Immediate or delayed respiratory sensitization and asthma-like conditions.

SKIN: Reddening, swelling or blistering.

Medical Conditions Generally Aggravated by Exposure: Pre-existing unspecific bronchial hypersensitivity and potentially, any allergies.

Emergency and First Aid Procedures

INHALATION: Remove person to fresh air. SKIN: Remove contaminated clothing, wipe affected area with isopropyl alcohol, followed by soap and water. EYES: Flush immediately with water for at least 15 minutes, get medical attention. INGESTION: Give large amounts of water and consult a physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled

Properly protected personnel should contain spill. Ventilate area, cover spill with sawdust, vermiculite or other absorbent material. Scoop and place in open container and treat with decontamination solution (93% water, 5% ammonia, 2% detergent). Leave open in a ventilated area for 24 hours.

Waste Disposal Method

Bury or landfill decontaminated waste in accordance with Federal, State, and local environmental control regulations.

Precautions to Be Taken in Handling and Storing

Store in tightly closed containers in a cool, dry place protected from heat and moisture contamination.

Other Precautions: DO NOT RESEAL containers if contamination is suspected. Personal, good hygienic practices are recommended, like washing hands before eating or smoking.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*): MSHA/NIOSH approved respirator for high concentrations and emergency conditions.

Ventilation	Local Exhaust	Strongly recommended to maintain below OSHA TLV limits.	Special	None Known
	Mechanical (*General*)	Recommended	Other	None Known

Protective Gloves: Chemical Resistant, natural rubber	Eye Protection: Chemical worker's goggles

Other Protective Clothing or Equipment: Laboratory coats or suitable clothing to avoid skin contact. Safety showers and eye wash stations.

Work/Hygienic Practices: Wear protective equipment to prevent eye and skin contact.

☆ USGPO 1986-491-529/45775

ITEM*4.02

BEST COPY AVAILABLE

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY *(As Used on Label and List)*	*Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.*
HEAVY DUTY FIL, Modified Component A	

Section I

Manufacturer's Name ARNCO	Emergency Telephone Number (800)424-9300
Address *(Number, Street, City, State, and ZIP Code)* One Centerpointe Drive	Telephone Number for Information (202)483-7616
La Palma, CA 90623-1094	Date Prepared February 1988
(714)739-7900	Signature of Preparer *(optional)*

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*
TDI prepolymer		0.02 ppm $0.2mg/m^3$		
Petroleum hydrocarbon		$0.2mg/m^3$-TWA		

Section III — Physical/Chemical Characteristics

Boiling Point	302°F	Specific Gravity (H_2O = 1)	1.05
Vapor Pressure (mm Hg.)	NE	Melting Point	N/A
Vapor Density (AIR = 1)	NE	Evaporation Rate (Butyl Acetate = 1)	NE

Solubility in Water
Insoluble, reacts with water to liberate carbon dioxide gas.

Appearance and Odor
Coffee brown liquid with slight isocyanate smell.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
270°F COC	N.E.	NE	NE

Extinguishing Media
Dry chemical, chemical foam, carbon dioxide.

Special Fire Fighting Procedures
Fire fighters should wear self-contained pressure demand breathing apparatus. Use water to cool fire exposed containers. Eliminate all sources of ignition.

Unusual Fire and Explosion Hazards
During a fire toxic gases are generated. Closed containers may explode from extreme heat or from extreme heat or from water contamination as pressure buildup may cause violent rupture of these containers.

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid Open flame and storage temperature above 120°F.
	Stable	X	Stable under normal, recommended storage conditions.

Incompatibility (*Materials to Avoid*)
Water, alcohols, ammonia, amines, and alkalis.

Hazardous Decomposition or Byproducts
Carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides, and traces of HCN.

Hazardous Polymerization	May Occur	X	Conditions to Avoid Exposure to high temperatures and with materials listed under "INCOMPATIBILTY".
	Will Not Occur		

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion?

Health Hazards (*Acute and Chronic*)
Inhalation of vapors or mists can cause irritation of the upper and lower respiratory tract; severe irritation to the eyes causing redness, tearing or blurred vision.

Carcinogenicity: NTP? X IARC Monographs? OSHA Regulated? X
For hazard communication purposes under OSHA Standard 29 CFR Part 1910.1200, this product contains TDI, a chemical listed as a potential carcinogen by NTP.

Signs and Symptoms of Exposure
Dizziness, nausea, asthma like symptoms, impaired ventilatory capacity; redness and tearing of the eyes, blurred vision; and skin swelling or blistering.

Medical Conditions Generally Aggravated by Exposure
Pre-existing unspecific bronchial hypersensitivity and potentially, any allergies.

Emergency and First Aid Procedures
INHALATION: Remove person to fresh air. If breathing is difficult; administer oxygen. If breathing has stopped, apply articial respiration and call a physican. EYES/SKIN CONTACT: Flush eyes immediately with water for at least 15 minutes; wash affected skin with soap and water. Get prompt medical attention if irritation occurs.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
Respiratory protection must be worn during cleanup. Cover the spill with sawdust or other absorbent material, scoop and place in open container and remove to well ventilated area to be treated with a decontamination solution made up of: (93% water, 5% conc. ammonia, 2% detergent). Leave container open for 24-48 hours. Wash down the spill area thoroughly with decontamination solution.

Waste Disposal Method
Decontaminated waste must be disposed of in accordance with Federal, State, and local environmental control regulations. It is your duty to comply with the "Clean Air Act", "Clean Water Act", and "Resources Conservation and Recovery Act".

Precautions to Be Taken in Handling and Storing
Store below 100°F in tightly closed containers to prevent atmospheric moisture contamination. DO NOT RESEAL containers if contamination is suspected. DO NOT store near open flame or high heat.

Other Precautions
Wear protective equipment to prevent eye and skin contact. Avoid unnecessary exposure to vapors or mists. Wash hands thoroughly before eating or smoking.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*)
Use MSHA/NIOSH approved respirator, especially at elevated temperatures and emergency conditions.

Ventilation	Local Exhaust	Recommended to maintain vapor concentrate below TLV.	Special	None
	Mechanical (*General*)	Recommended	Other	None

Protective Gloves Natural rubber or neoprene	Eye Protection Chemical workers' splash goggles

Other Protective Clothing or Equipment
Laboratory coats or suitable clothing to avoid eye/skin contact. Accessible safety showers & eye wash stations.

Work/Hygienic Practices
Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and processing under adequate exhaust ventilation.

* USGPO 1988-491-529/45775

ITEM #4.02

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
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Form Approved
OMB No. 1218-0072

IDENTITY *(As Used on Label and List)*
SUPERFLEX Component A

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Section I

Manufacturer's Name ARNCO	Emergency Telephone Number (800)424-9300
Address *(Number, Street, City, State, and ZIP Code)* One Centerpointe Drive	Telephone Number for Information (202)483-7616
La Palma, CA 90623-1094	Date Prepared March 1987
(714)739-7900	Signature of Preparer *(optional)*

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*
Toluene diisocyanate (TDI) and TDI prepolymer		0.02 ppm		
Petroleum hydrocarbons		0.2mg/m^3		

Section III — Physical/Chemical Characteristics

Boiling Point	440°F	Specific Gravity (H_2O = 1)	1.01
Vapor Pressure (mm Hg.)	NE	Melting Point	N/A
Vapor Density (AIR = 1)	NE	Evaporation Rate (Butyl Acetate = 1)	NE

Solubility in Water
Insoluble, reacts with water to liberate carbon dioxide gas.

Appearance and Odor
Coffee brown liquid, pungent odor.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) 356°F COC	Flammable Limits	LEL NE	UEL NE

Extinguishing Media
Dry Chemical, chemical foam, carbon dioxide.

Special Fire Fighting Procedures
Wear self-contained pressure demand breathing apparatus to guard against incompletely combusted carbon products.

Unusual Fire and Explosion Hazards
Closed containers may explode from extreme heat or from water contamination (reaction releases carbon dioxide).

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid: Moisture contamination will release carbon dioxide, leading to pressure build-up in closed containers.
	Stable	X	At ambient temperature and pressure.

Incompatibility (*Materials to Avoid*): Water, alcohols, strong bases, oxidizers and amines.

Hazardous Decomposition or Byproducts: High temperature and buring conditions may release TDI vapors, oxides of carbon and nitrogen, and traces of HCN.

Hazardous Polymerization	May Occur	X	Conditions to Avoid: Avoid prolonged heating above 160°F, for polymerization may but does not constitute a safety hazard.
	Will Not Occur		

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion? X

Health Hazards (*Acute and Chronic*): INHALATION: May cause breathlessness, dizziness and nausea.

SKIN: Irritation and allergic sensitivity may occur for some individuals.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?
Contains petroleum oils similar to ones categorized by IARC as causing skin cancer in mice after prolonged and repeated contact. Any potential hazard can be minimized by using recommended protective equipment to avoid skin contact and by washing thoughly after handling.

Signs and Symptoms of Exposure: INHALATION: Immediate or delayed respiratory sensitization and asthma-like conditions.

SKIN: Reddening, swelling or blistering.

Medical Conditions Generally Aggravated by Exposure: Pre-existing unspecific bronchial hypersensitivity and potentially, any allergies.

Emergency and First Aid Procedures
INHALATION: Remove person to fresh air. SKIN: Remove contaminated clothing, wipe affected area with isopropyl alcohol, followed by soap and water. EYES: Flush immediately with water for at least 15 minutes, get medical attention. INGESTION: Give large amounts of water and consult a physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
Properly protected personnel should contain spill. Ventilate area, cover spill with sawdust, vermiculite or other absorbent material. Scoop and place in open container and treat with decontamination solution (93% water, 5% ammonia, 2% detergent). Leave open in a ventilated area for 24 hours.

Waste Disposal Method: Bury or landfill decontaminated waste in accordance with Federal, State, and local environmental control regulations.

Precautions to Be Taken in Handling and Storing
Store in tightly closed containers in a cool, dry place protected from heat and moisture contamination.

Other Precautions: DO NOT RESEAL containers if contamination is suspected. Personal, good hygienic practices are recommended, like washing hands before eating or smoking.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*): MSHA/NIOSH approved respirator for high concentrations and emergency conditions.

Ventilation	Local Exhaust	Strongly recommended to maintain below OSHA TLV limits.	Special	None Known
	Mechanical (*General*)	Recommended	Other	None Known

Protective Gloves: Chemical Resistant, natural rubber	Eye Protection: Chemical worker's goggles

Other Protective Clothing or Equipment: Laboratory coats or suitable clothing to avoid skin contact. Safety showers and eye wash stations.

Work/Hygienic Practices: Wear protective equipment to prevent eye and skin contact.

* USGPO 1986-491-529/45775

ITEM# 4.02

Material Safety Data Sheet

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IDENTITY *(As Used on Label and List)*
PERMACOR Component A

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Toluene diisocyanate (TDI) and TDI prepolymer		0.02 ppm		
Petroleum hydrocarbons		0.2mg/m^3		

Section III — Physical/Chemical Characteristics

Boiling Point	440°F	Specific Gravity (H_2O = 1)	1.01
Vapor Pressure (mm Hg.)	NE	Melting Point	N/A
Vapor Density (AIR = 1)	NE	Evaporation Rate (Butyl Acetate = 1)	NE

Solubility in Water
Insoluble, reacts with water to liberate carbon dioxide gas.

Appearance and Odor
Coffee brown liquid, pungent odor.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
356°F COC		NE	NE

Extinguishing Media
Dry Chemical, chemical foam, carbon dioxide.

Special Fire Fighting Procedures
Wear self-contained pressure demand breathing apparatus to guard against incompletely combusted carbon products.

Unusual Fire and Explosion Hazards
Closed containers may explode from extreme heat or from water contamination (reaction releases carbon dioxide).

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid: Moisture contamination will release carbon dioxide, leading to pressure build-up in closed containers.
	Stable	X	At ambient temperature and pressure.
Incompatibility (*Materials to Avoid*)			Water, alcohols, strong bases, oxidizers and amines.
Hazardous Decomposition or Byproducts			High temperature and buring conditions may release TDI vapors, oxides of carbon and nitrogen, and traces of HCN.
Hazardous Polymerization	May Occur	X	Conditions to Avoid: Avoid prolonged heating above 160°F, for polymerization may occur but does not constitute a safety hazard.
	Will Not Occur		

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion? X

Health Hazards (*Acute and Chronic*)

INHALATION: May cause breathlessness, dizziness and nausea.

SKIN: Irritation and allergic sensitivity may occur for some individuals.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

Contains petroleum oils similar to ones categorized by IARC as causing skin cancer in mice after prolonged and repeated contact. Any potential hazard can be minimized by using recommended protective equipment to avoid skin contact and by washing throughly after handling.

Signs and Symptoms of Exposure

INHALATION: Immediate or delayed respiratory sensitization and asthma-like conditions.

SKIN: Reddening, swelling or blistering.

Medical Conditions Generally Aggravated by Exposure: Pre-existing unspecific bronchial hypersensitivity and potentially, any allergies.

Emergency and First Aid Procedures

INHALATION: Remove person to fresh air. SKIN: Remove contaminated clothing, wipe affected area with isopropyl alcohol, followed by soap and water. EYES: Flush immediately with water for at least 15 minutes, get medical attention. INGESTION: Give large amounts of water and consult a physician.

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Waste Disposal Method

Bury or landfill decontaminated waste in accordance with Federal, State, and local environmental control regulations.

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Store in tightly closed containers in a cool, dry place protected from heat and moisture contamination.

Other Precautions

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Respiratory Protection (*Specify Type*): MSHA/NIOSH approved respirator for high concentrations and emergency conditions.

Ventilation	Local Exhaust	Strongly recommended to maintain below OSHA TLV limits.	Special	None Known
	Mechanical (*General*)	Recommended	Other	None Known

Protective Gloves: Chemical Resistant, natural rubber	Eye Protection: Chemical worker's goggles

Other Protective Clothing or Equipment

Laboratory coats or suitable clothing to avoid skin contact. Safety showers and eye wash stations.

Work/Hygienic Practices

Wear protective equipment to prevent eye and skin contact.

☆ U.S.G.P.O. 1986-491-529/45775